

GARY'S PIANOFORTE
CLASS-BOOK



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MRS. M. LOUISE KING, . .

PIANO - FORTE

CLASS BOOK;

CONTAINING

PRACTICAL, RUDIMENTAL LESSONS

FOR

STUDENTS OF MUSIC,

AND


ESPECIALLY CALCULATED TO BE OF SERVICE TO THOSE WHO ARE

PREPARING TO TEACH.

By C. S. P. CARY.

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PREFACE.

THE origin of this work was wholly in the author's personal need of a class book more complete than any of the Primers or Catechisms heretofore published, and less expensive, less voluminous, and more practical for promiscuous classes than the extensive works of such writers as Weber.

In the matter of musical knowledge, this book claims to impart nothing new,—to say nothing which has not been said before by some one, at some time; that, at the present day, would indeed, be a difficult matter. Neither is this work intended to take the place of a “Piano Instruction Book,” nor to supply the place of a teacher. No book can do that. The author has simply gathered together and arranged, in systematic form, those first principles of the Theory and Technique of music which are absolutely necessary to the intelligent progress of a pupil through his first few years of study, and endeavored to set this knowledge before him in a manner which, by its simplicity, will attract and, perhaps, lead him on to an interest in the deeper study of Harmony, and, eventually, to a thorough Musical Education.

The greater portion of the work has been used in manuscript by the author for ten years; but, from constant additions, it has become so troublesome for classes to copy, and the demand for it has grown so great among those of the writer's pupils who are teaching, as to make its publication a necessity.

Teachers who use this work in schools must have blackboards with staffs upon them, and they should hold their recitations either weekly or semi-weekly. Teachers of village classes can usually obtain the use of some school room, or can have a blackboard in their lesson room, and meet their classes weekly. Very small classes can meet in any room, with music paper or music slates, upon which to write the exercises. Classes of very young children may commence at chapter second, and omit, until they are older, the chapters on the Metronome and Movements, and small portions of other chapters, according to the judgment of the teacher.

C. S. P. C.

INTRODUCTION.

TO PARENTS.

First, Selection and Care of Piano. It is folly, in this age, to say that any one firm manufactures pianos superior in every respect to all others. While, therefore, we cannot advise what instrument to buy, we can, perhaps, make some useful suggestions. The piano for a child or young girl should have a light, elastic touch ; many hands have been injured for life, by using, when young, an instrument which required too much strength ; and even if no injury is sustained, the touch can never be elegant, while it requires all the strength which the pupil possesses to put down each key and hold it firmly until the next is struck. A young man may use a piano requiring more strength, but it is better even for him to take a light touch first, and a heavier one after a year or two. The tone of the instrument should be pure and singing, that the ear be cultivated as well as the hands. Keep it always in perfect tune by placing it in the hands of a skillful tuner, and directing him to tune it when necessary. Good instruments are often injured by tuners of little knowledge and less experience. Keep it free from dust and dampness, and shut it at night. Keep it in a moderate temperature, exposing it neither to freezing cold nor to eighty degrees of heat.

The Piano Stool should be cane bottomed or cushioned hard, without springs, and large enough to be

comfortable. Its height should be such that, when the pupil is seated, the elbows will be about an inch above the level of the keyboard.

Secondly, Selection of Teacher. It is not enough that the teacher has great execution, vast knowledge, and a wide reputation as a player; he must *know how to teach*. This ability to *impart* knowledge must first be natural, and then cultivated by experience. To judge of a teacher's execution and knowledge, talk with *him* and hear *him* play; to judge of his ability to teach, talk with his *pupils* and hear *them* play. Not *one only*, because that one might be so dull mentally, and so destitute of musical ability, that no one could make him a musician; or, he might have such rare talent, that he could learn with very little teaching; but judge by the majority of his class. Hear them play and attend the examinations of their musical recitations; if you find that, as a class, they have a thorough knowledge of the rudiments of music—its theory and its technique—and many, in addition to this, have fine execution, then you can safely trust that teacher. A thoroughly educated, conscientious teacher, will impart to the pupil, in one year, more knowledge than a teacher who is ignorant or careless, in three. You can then afford to pay this teacher three times as much, because the pupil is fitted to play or to teach in one-third of the time.

Thirdly, Parents' Care and Encouragement. In the musical education of their children, more is dependent upon parents than they imagine. It is not enough that they purchase an expensive piano and pay the large bills of some popular Professor; in nearly every instance where the parents' labor ends here, what

do we see? At the end of four or five years, in return for their money, the pupil will play reluctantly a waltz, and polka or two, and these so indifferently as to show a total want of any real knowledge of the theory or technique of music. When children are attending school, the mother does not trust them to go early or late as they choose or stay at home entirely, when it is their whim to do so; she sees that they go, and, at the time appointed; and, if they have lessons to learn at home, she sees that they study them. She should also exercise the same watchful control over the practice which they are to do at home. The five finger exercises and scales, upon which they are obliged to spend so much time, are quite as dull and uninteresting to them as their grammar; few children will study the latter, with any steadiness, without a little parental authority and encouragement; how then can they be expected, at the same age, to study music with the perseverance and judgment which belong only to mature years?

The conscientious and ambitious teacher has an aim in his labor beyond mere pecuniary profit; he desires reputation for himself and, necessarily, the advancement of his pupils. He is as much elated, when he has succeeded in making a scholar play elegantly, as the artist, when he has completed a fine picture; therefore, while a teacher may not need the interest of the parents as a stimulant, it certainly is but just that he should have their coöperation and encouragement.

TO THE STUDENT.

When a man takes up the study of a profession by which he expects to earn his bread, and perhaps acquire fame, he devotes as many hours of the day and evening to that study as his health will permit. Music requires no less study than law, medicine, or theology. But there is this difference between the study of any other profession and that of music; the young man who selects, for example, law as a profession, may, indeed must, spend his first years in primary schools and colleges, studying languages and science, and commencing law study, perhaps, when he is nineteen or twenty years old. The young man who selects music for his profession, must commence between eight and eleven years of age to practice two or three hours per day, and continue this steadily until he is fourteen. The reason of this is, that the muscles of the hand and arm must be developed during their growth, and acquire the necessary strength and flexibility, to endure the laborious practice which must come after that age. At about fourteen, this serious study and practice may commence. A young man then, with the assistance of sufficient out door exercise, can easily endure six or seven hours' study and practice; very few young ladies are able to *average* over four. There are two reasons for this. First, their hands are generally so small that the strain upon them in many passages is too great to be endured for any length of time. Secondly, young ladies take so little out door exercise, that their joints and muscles are all weaker. The young lady,

therefore, who studies music as a profession, with any expectation of competing successfully with the stronger sex, must neglect no physical training which will give her strength and endurance.

The effects of dissipation upon either sex, whether of late hours simply, or of smoking or drinking, if they do not manifest themselves at once in a heavy head which cannot study, will eventually ruin the musician, and him, sooner than any other person. We say sooner, because the first evil effects of dissipation are upon the nervous system, and a great player must have unerring nerve, a clear head and muscles like iron. The lawyer may go to his work with unsteady hands, if his brain is clear, but the musician's hand must never tremble.

We quote here, for the instruction of those who know nothing of the mental and physical exertion of the musician and think it a mere matter of pleasant amusement to play the piano, the following, entitled "Musical Curiosities":

"Of all the discoveries for which we are indebted to German professors, one just published by Herr Schmidt may claim to rank among the most singular. Hearing Herr Rubenstein play at a concert, he took it into his head to count the notes which that famous pianist had played by heart, and found them to amount to 62,990, fully justifying, therefore, an assertion previously made by the physiologist Haring, that the pianist's calling lays about the heaviest tax of any upon the memory. Herr Schmidt was, however, not satisfied with this enumeration. Applying Austrian neukreutzers as a dynamometer, he tested the pressure necessary to strike a key on Herr Rubenstein's piano, and found it to be equivalent to 24 neukreutzers, which is 2-15 ounces. The force exerted by the pianist in playing the 62,990 note piece, he therefore calculated to amount to nearly 94½ cwt. Herr Schmidt

then intruded into Herr von Bülow's room and tried his piano which has a harder touch, but which, no doubt, Herr Rubenstein could have played on perfectly well. Here the pressure would have amounted to 118 1-10 cwt."

The young lady student need, however, feel no discouragement on reading this, for there are many female pianists who have done work requiring quite as much physical strength as that done by Herr Rubenstein, and have performed it quite as elegantly, among whom we may mention Madame Clara Schumann, Madame Arabella Goddard, and Mademoiselle Anna Mehlig.

It is evident, from what has been said, that music, as a profession, cannot be studied as one studies a simple accomplishment—an aside—like ball playing, rowing, netting, or embroidery. It is a study requiring as much perseverance and as good a quality of brain to acquire, as much common sense and a character as well balanced to practice successfully, as any other profession. Thoroughly studied and worthily practiced, music must rank with the noblest callings of mankind.

Learning music as a simple accomplishment—that is—for dancing in the parlor, to accompany the voice at home in simple songs, and to play ordinary solos, is quite a different matter from studying it with reference to making either teaching or playing a profession. Hummel says, "three hours' attentive and faithful practice each day, will, in the space of three or four years, enable the student to obtain a *fair degree of excellence*." How amazed would he be to see those occupying the *teacher's chair* who had never taken *one whole year* of lessons from any competent teacher! It is a deplorable fact,

that there are hundreds of persons teaching not only private classes, but holding positions of influence in schools, who actually do not know the proper fingering of the major and minor scales, and have no more comprehension of a symphony than of the music of the spheres.

POSITION AT THE PIANO.

Sit erect; neither so near as to bend the body backward from the waist to get it out of the way, nor so far back as to bend forward nearly double to reach the keyboard. It is a mistake, to suppose that sitting at the piano necessarily makes the student round shouldered or deformed. There is almost no other labor or study which admits of such a continually perfect posture as piano playing; and it is only those, who from weakness or indolence, would sit improperly anywhere, who are injured by sitting at the piano; and these persons would be equally injured sitting at any other employment.

Avoid all contortions of the muscles of the face or twisting of the mouth or jaws. There are some players whose faces, owing to such habits, are so painful to look upon that one must sit behind them, to receive any pleasure from their playing.

Let the arms hang naturally at the side, neither sticking the elbows out unnecessarily, nor holding them nearer the body than is natural. The wrist should be free from stiffness, neither raised nor depressed, but held quietly a little higher than the middle joint of the second finger.

The hands should be flat on the top, never raising or depressing the knuckles.

The fingers should be curved from the knuckles so as to strike the keys with the extreme ends, but be careful not to make the curve so great that the nails may be heard upon the keys, or the ease of movement impeded.

The position of the fingers upon the keys should be such that the outside of the thumb will lie upon the keys about half way to the first joint; take care never to let it hang off the keyboard. The first finger should strike the white keys about two-thirds of the distance from the end to the black keys; the second finger, a little nearer the black keys; the third about half the distance from the end to the black keys; and the little finger about as far on the keys as the thumb.

The nails should be cut so short as not to come beyond the finger, and handsomely rounded according to the outline of the finger.

The feet should be placed with the heels upon the floor, and the toe of one foot upon each pedal, ready for use; the feet should never be crossed at the piano.

RULES FOR PRACTICE.

When the hour for practice arrives, go at once to the piano and commence upon the lesson the teacher has given you. By stopping awhile to dread it and loitering by the way, fifteen minutes are easily lost; then, if, when seated, you play some old air, whistle or sing some other, or try to pick out by ear something you have heard, playing, perhaps, carelessly once through your lesson, you had better stay entirely away from the piano, for, by such a course, your own time is wasted as well as your parents' money, and you become a disgrace to your teacher and yourself.

If you have a certain number of hours given you for practice, and do not know how best to divide the time between finger exercises, scales, tunes, &c., ask your teacher for a programme of practice.

A certain amount of time *must* be set apart for *scale practice*; if your teacher does not give it to you, take it yourself. Hummel, when asked how he obtained such immense execution, answered, "I owe it first to the scales, secondly to the scales, and thirdly again to the scales." Important as these are, they may be practiced, not only without profit, but with serious injury. As this work is, in no way, intended to be a Piano-Forte Instruction Book, or to take the place of a teacher, we can only recommend you not to practice the scales or indeed anything else, until you are first taught how to do so *correctly*. We would, also, recommend to both teachers and pupils the careful study of *accented scales*, as given in "Method for the Piano-Forte," by Wm. Mason and E. S. Hoadley. This system has long been taught by private teachers, particularly by those who have been educated in the conservatories of Europe, but it has not been published in America until by Messrs. Mason & Hoadley. It is the *only system* which can give a clear, rapid execution of the scales, with perfect *equality* of touch and tone.

[In addition to the above work, note rules laid down in "Technical Studies for the Piano-Forte" by Louis Plaidy, sections 5 and 7.]

Much is said in subsequent pages about slow practice, to which we invite special attention.

The exact manner of using the fingers and wrists can be taught properly only at the piano, and only by well educated teachers.

Playing a piece straight through and through is not practicing it; that is simply reading it. When you take up a piece to learn, ask yourself the following questions: What is the name of it? By whom is it written? What *opus* of the author is it? What form of composition is it, whether air and variations, *tarantelle*, *sonate*, or *fantasie*? What scale is it in? then play that scale to refresh your memory with the fingering. What time is it in? then analyze, (according to directions given in chapter V. pa. 53) as many measures as are necessary to prove to yourself that you can count it. Now play it slowly through, striking no note until you have found it, and not omitting to count a single measure. Then commence practicing by piece-meal—in small portions—stopping at the difficult passages till they are conquered. Much time is lost by playing the easier measures as many times as the harder ones. When you have practiced one or two hours upon the piece, lay it aside until later in the day or until the next day, and practice some study or old piece; the mind is rested by the change. Practice from one to three hours every day upon the piece, according to the number of hours you practice per day, and according to the difficulty of the piece. When you can play it easily and steadily through, commence to observe every mark of expression. This done, look to see what movement the piece is in, and, if it is metronomized, bring it up to the required rapidity. If it is not metronomized, and you have not yet sufficient knowledge of movements to trust your own judgment, consult your teacher or some other musician.

When you think you play it finely, seek to hear some one play it better.

Whether it takes a long or a short time to learn a piece is of little moment; the piece should not be left for another until it is learned. *One piece* played with a true appreciation of the author's meaning, with every chord struck pure and clean, the *fortes* given with deep power and the *pianissimos* with delicate tenderness, and every phrase artistically finished, is more acceptable to your audience, and will bring you a better musical reputation than ten pieces blundered through, with blurred runs, muddy chords, and slovenly *arpeggios*. The pianist must remember that the public are only interested in the result of his labor; they care not whether the piece which delights them was learned in a week, or whether it cost him six months' hard labor. If his playing is perfect, they at once count him an artist; if imperfect, he is condemned; they cannot decide whether his errors are attributable to a want of musical ability and appreciation or to insufficient practice. Generally, in such cases, both are true; the fact that he will offer to the public an unfinished piece is proof that he is wanting in musical appreciation. The true musician shrinks from marring, by imperfect execution, the composition of a master.

When you have learned perfectly one tune, play that if asked. When you have learned the second, retain the first and so on, till you have, at least, twelve pieces in your repertoire. From that time you may, occasionally, drop one, always however retaining in your memory from twelve to twenty solos. This is easily done by setting apart a certain number of them to be played two days in a week, a certain other number two other days and so on, making such a programme of practice that all will be played at least twice per week. By this system, the pianist has always something to play.

Easy pieces and musical trifles are not necessarily worthless; people do not always want to hear a long, difficult solo, and you are not always in condition to play such a solo; therefore keep in your memory a few light pieces, with which to entertain your friends.

Never play snatches of pieces; if you cannot go through a piece, or a movement of a piece, do not attempt it.

If possible, spend an hour each day reading music which you have no intention of learning. To read readily is a great assistance to the player. Read often duetts with others.

Omit no opportunity to accompany other instruments or singers; fine accompanists are rare.

Play much from score.

[See chap. on Staves and Clefs.]

Commit the greater part of your solos to memory; it is not only inconvenient to be dependent always upon notes, but, when he is not obliged to watch both music and hands, the pianist plays with more freedom and effect.

Never begin a piece faster than you can with certainty go through it.

Passages which, when learned, are to be *fortissimo*, should be practiced, occasionally, *pianissimo*; as, thereby, a truer appreciation of their meaning is obtained, and you are less likely to pound them. It is also well to practice *pianissimo* passages, occasionally, with a *fortissimo* touch; because it assists in retaining perfect distinctness of tone when they are softened.

Love and respect your piano ; never place anything upon it which can soil or mar it, and sit down before it with clean hands and clean nails.

Respect and obey your teacher. Present yourself before him clean in person and attire ; sit quietly down, making no excuses except in case of serious illness, or unless he asks the reason for some unusually imperfect lesson. Remember you are there to be taught ; therefore do not *talk*, but *listen* ; speak of nothing which does not pertain to your lesson, unless it is necessary. Pass nothing you do not understand, without asking an explanation. Do not forget his least *suggestion*, let it be to you a command. Never be impatient under his criticisms, even if they seem to you unnecessarily severe ; it is easier for him to allow you to play without correction ; therefore, when he stops you for criticisms, rest assured you need them, and profit by them, for it is just these you are paying for.

Read the lives and letters of the musicians, and remember the names of their principal compositions.

[*Remark.* It is not long since a young lady *teacher*, while looking over the music which lay upon a friend's piano, came across a symphony of Haydn, and said, wonderingly, "Haydn, Haydn, he must be some new composer, is he not?"]

Improve every opportunity of hearing good music, whether vocal or instrumental, and strive to produce on the piano the same sympathetic effects which you hear from fine voices and wind instruments. This, of course, is very difficult ; but Thalberg says, "emotion renders us ingenious, and the necessity of expressing what we feel creates for us resources which never occur to the mechanical performer."

Listen to the criticisms of musicians upon the performances of others, and think if they will not apply also to yours.

Do not be selfish in playing with others; the perfection of music is only in many instruments, and every one cannot play first part; therefore, in all concerted pieces, show your good nature and artistic appreciation of the importance of all the parts, by a willingness to take any instrument or part which needs you.

CHAPTER I.

SOUNDS, VIBRATIONS, MUSIC DEFINED.

What is sound?

It is the audible action of a vibrating body.

What is a musical sound?

It is a sound of a determinable pitch; any other sound may be called noise. A sound is not, therefore, necessarily musical, merely because it is agreeable.

What is understood by the term, pitch?

Literally, a point; musically, it has reference to the character of sounds, whether high or low.

How are musical sounds produced on the piano or any other stringed instrument.

By the vibration of strings.

What does vibration mean?

The act of moving one way and the other, in quick succession.

What is the result of quick vibrations?

A high tone.

What is the result of slow vibrations?

A low tone.

Which vibrates faster, a long string or a short one?

All other things being equal, a short one ; consequently, we have long strings for the bass or low tones, and short strings for the treble or high tones.

What other things affect the vibration of strings ?

The tension, thickness, and hardness ; a hard string, stretched tightly, gives a higher tone than a soft, loose string.

When is a stringed instrument out of tune ?

When the tension of the strings is not such as to produce the exact number of vibrations for the required pitch.

Why can we not determine the pitch of all sounds ?

Because some bodies do not possess the requisites for uniform rapidity of vibrations in all their parts. When such bodies are struck, some parts will vibrate a certain number of times in a second ; others, a greater or a less number ; consequently, the vibrations cross and confuse each other, and no particular pitch of sound is produced.

What is the slowest vibration which gives a perceptible sound ?

From thirty to thirty-two vibrations in a second. The highest sound is nine octaves higher and requires 16,384 vibrations in a second ; so that nine octaves seems to be the compass of tones appreciable by the human ear.

What is the proportion of the number of vibrations to the pitch of the sound ?

All other things being equal, a string which vibrates twice as fast as another, gives a tone twice as high, or, we should say, an octave higher.

What is the proportion of the length of the string to the sound produced ?

It is in inverse proportion ; that is, a string, half as long as another, will give a tone twice as high, because it will vibrate twice as fast.

What is the effect of stiffness ?

A string gives a higher tone in proportion to its stiffness.

What is the effect of thickness ?

A thick string vibrates faster than a thin one, in proportion as the thickness increases the stiffness.

What is the number of vibrations required to produce the tone called great C, or that C which is written on the second line below the bass staff ?

One hundred and twenty-eight in a second.

How are the different octaves of the piano named, to distinguish them from each other ?

The octave, commencing on great C and going upwards, that is, on the second C below that c which is nearest the middle of the piano, is called the great octave ; and the letters in that octave are called great C, great D, great E, &c. The octave, below the great octave, is sometimes called the contra octave ; and the letters in that octave are called contra C, contra D, contra E, &c. This octave is sometimes also designated, the great once marked octave ; and the letters of that octave are written thus : C, D, E, &c. The octave, next above the great octave, is called the small octave ; and the letters written thus : c, d, e, &c. The next octave above the small octave, is called the small once marked octave ; written thus : c, d, e, &c. The next octave higher, is called the twice marked octave ; written thus : c, d, e, &c. The next higher octave is the thrice marked octave : c, d, e, &c.

[See plate of keyboard and staves at the end of this chapter.]

What is music ?

First, it is any succession of sounds, so modulated as to please the ear. Such a succession of sounds is called a melody. Secondly, it is an agreeable combination of sounds. Such a combination of sounds is called harmony.

What is musical composition?

It is the art of rightly putting sounds together in the construction of music.

What is the art of music?

It consists in the expression of the thoughts, feelings, and passions, by means of musical sounds.

What is musical execution?

It is the art of rightly playing music which has been composed.

Does it follow that a person can compose music, because he can play well?

No more than it follows that a person can write a poem, because he can read one finely. Indeed, it is true, that but very few of the great players have composed fine music; and equally true that great composers have rarely been superior players. This is, in part, accounted for by the fact, that it requires the study of a life-time to make a fine executant; and it is also the work of a life-time to write many great musical compositions. There have been a few geniuses in the world, like Mozart and Mendelssohn, to whom the greatest musical ideas came by inspiration—without study. Their only labor in writing was the manual one of putting their thoughts on paper. These men also gained their execution as easily as they learned their mother tongue; but they are exceptions to the rule, and they prove this fact, that the art of music, like a talent for the composition of pictures or of poetry, is a gift from the Author of our being.

TOGETHER WITH THE BASS AND TREBLE STAVES, AND THE LETTERS.

[illegible]

CHAPTER II.

NOTES AND RESTS.

How many musical sounds are there ?

Seven.

In how many respects do these sounds differ from each other ?

In length, strength, and pitch.

To what three departments do these differences give rise ?

To Rhythmics, Dynamics, and Melodics.

What does Rhythmics mean ?

It is from a Greek word signifying measure, and it treats of the length of sounds.

What is the meaning of Dynamics ?

It is from a Greek word meaning power, and it treats of the softness or loudness of sounds.

What is the meaning of Melodics ?

It is from two Greek words, and it treats of the pitch of sounds.

What characters are used to represent sounds ?

Notes.


How many do we use ?


Seven.





How are they written to show the difference in the length of sounds ?

By making them of different forms.

TABLE OF OLD NOTES WITH OLD NAMES.



 , *Maxima, Massima, Maxime*.—The Large.



 , *Longa, Lunga, Longue*.—The long.



 or  ,  ,  , *Brevis, Breve, Brève*. —The short.

 , *Semibrevis, Semibreve, Demibreve*.—The half-short.




 or  , *Minima, Minime, Demi-blanche*.—The smaller.

 or  , *Semiminima, Un Quarto, Noire*.—The half-smallest.

 or  , *Fusa, Unca, Croma*.—The extended or hooked.

 or  , *Semifusa, Bis Unca*. — The twice crooked, double stemmed.

 or  , *Subsemifusa, Terunca*.—The thrice crooked, triple stemmed.

Each note is twice as long as the following note. All notes longer than the *Semibreve* being now discarded, the *Semibreve*,  , is taken as unity, and the name, whole note, given to it. The *Minima*,  being half as long as the whole note, is called a half note; the *Semiminima*,  , being half as long as the half note, is called a quarter note, &c. At the present day, some teachers still adhere to proper names, instead of employing entirely the fractional denominations as names for notes, as follows:

Whole,  Semibreve.


$\frac{1}{2}$  Minim.

$\frac{1}{4}$  Crotchet.

$\frac{1}{8}$  Quaver.

$\frac{1}{16}$  Semiquaver.

$\frac{1}{32}$  Demisemiquaver.

$\frac{1}{64}$  Hemidemisemiquaver.



When notes with crooks occur in succession, they are written thus: four sixteenths, , two eighths, .

TABLE OF NOTES, SHOWING THEIR COMPARATIVE LENGTH.

<p>One Whole Note is equal</p>			
<p>to two Halves,</p>			
<p>or four Quarters,</p>			
<p>or eight Eighths,</p>			
<p>or sixteen Sixteenths,</p>			
<p>or thirty-two Thirty-seconds,</p>			
<p>or sixty-four Sixty-fourths.</p>			

[Let the teacher, who uses this book in class, oblige every pupil to write upon the blackboard a half note and the two notes to which it is equal, the four notes to which it is equal, the eight notes to which it is equal, &c. :



Then, write a quarter note, and the two notes, the four notes, and the eight notes to which it is equal, *e. g.*



Then let him exercise the class in every possible manner, upon the length of notes, until it is impossible to puzzle any member upon the subject.]

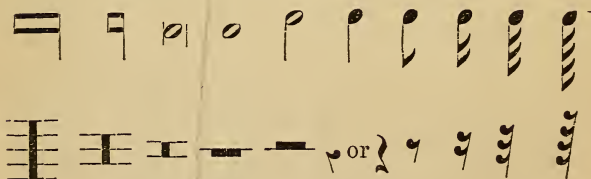
What are rests?

Marks of silence; at which, the fingers are to be raised and held above the keys, as long as they would be held upon the keys, were the rest a note.

How many rests have we?

Seven; every note has its corresponding rest.

TABLE OF RESTS, WITH NOTES.



When the old notes were discarded, of course, the rests belonging to those notes were no longer needed, so that the rests, in present use, begin with the whole note rest.

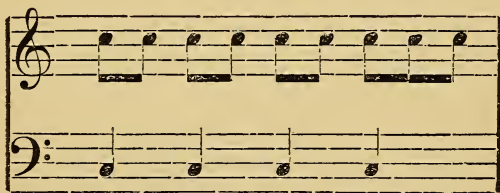
[Let class write all the rests upon the board without the notes to which they belong, and give their names and comparative length.]

What is a triplet?

It consists of three notes played in the time of two of the same kind, or one of the next longer kind. They are generally marked with a slur and a figure 3 over or under them; *e. g.*



When a triplet is not thus marked, it is only by an analysis of the time of the measure in which such notes occur, that the pupil can decide, with certainty, whether they are triplets or not; *e. g.*



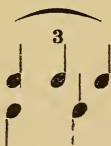
In the above example, the first three quarter notes in the bass have each two eighth notes played to them in the treble, leaving three eighths to be played to the fourth quarter note. These three eighths, then, must have their triplet value, although they are not so marked.

[Let class write triplets of every kind of note with the two notes, and the one note to which the triplet is equal; *e. g.*



The first note of a triplet is played with a slight accent.

When a triplet in one hand is played to two even notes in the other hand, the time of the three must be divided evenly between the two. This is done by playing the second of the two notes on the last half of the time which belongs to the second note of the triplet; *e. g.*



This gives to the first of the two notes the whole of the first triplet note and the first half of the second; to the second of the two notes, it gives the last half of the middle triplet note and the whole of the last triplet note. In very slow movements, this is easily done; in rapid passages, it is not so easy, and the better way is to play, as evenly as possible, the two notes in one hand and three in the other, without stopping to know exactly where they go together.

A triplet played to two notes, the first of which is dotted, is played thus ; *e. g.*

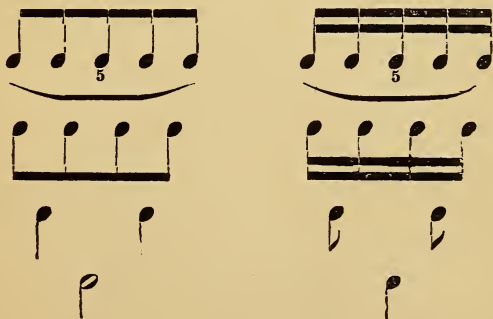


The second of the two notes must come after the last triplet note, because each triplet note has a third of the time of a quarter note, while the sixteenth has only a quarter of the time of a quarter note, and a third is more than a quarter.

When a triplet in one hand is played to four or five notes in the other hand, the hands must each execute their parts evenly and independently in the time allotted, and then they will play correctly together.

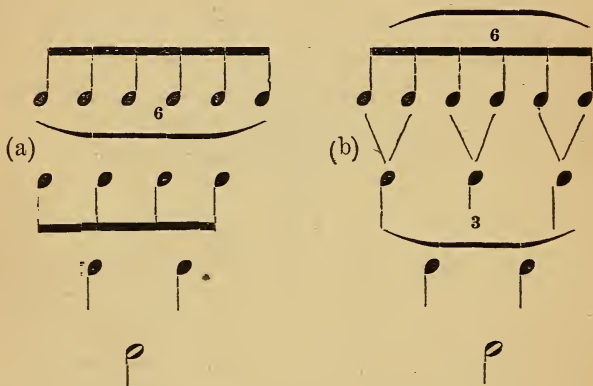
What is signified by a figure 5 placed over or under five notes ?

It signifies that the five notes are to be played in the time of four of the same kind ; *e. g.*

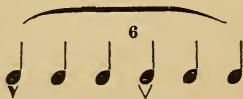


What is signified by a figure 6 placed over or under six notes?

It signifies that the six notes are to be played in the time of four of the same kind, or two of the next longer kind. Such a group of notes is called a sextole or sextolet. It may also be regarded as a triplet with each member divided into two notes; *e. g.*



While a sextole may be regarded as a triplet with its members divided as above at b, it must never be considered as two triplets, because it would then have two accents thus:



whereas the proper accent of a sextole is only upon the first note, thus:



Notes are often written as sextoles and marked with a figure 6, when they should properly be played as triplets and receive the triplet accent.

[Such passages can always be explained by the teacher at the piano, better than in such a limited work as this.]

The sextole, when played in one hand to a triplet in the other, is very easy, because the accent of neither is disturbed; but a sextole, played to four even notes in any ordinary movement, must be played according to the directions for playing a triplet to four or five even notes. In a very slow movement, a sextole is played to four even notes thus:



It will be seen in this example, that, for all purposes of time, these groups are played as if the sextole were two triplets, each triplet being played to two even notes; the greater care must therefore be used to prevent the triplet effect in the sextole. It is still more difficult to prevent a triplet accent when playing a sextole to two even notes;



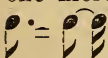


What is signified by a figure 7 placed over or under seven notes?

It signifies that the seven notes are to be played in the time of four of the same kind. We have also groups of

9, 11, 13, and, sometimes, 20, 30, or any other number of notes; their value must generally be determined by reference to the rest of the measure or the other part to which these groups are to be played.

What is the use of a dot after a note?

It makes the note half as long again, *e. g.*  If we count four to this half note, we shall count two more for the dot, making six. A dotted quarter,  If we count two to this quarter, we shall count one more for the dot, making three. A dotted eighth,  If this eighth had one count, it would have half a count more for the dot, making a count and a half, &c.

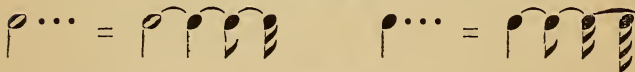
What is the use of a double dot?

The second dot is half as long as the first dot; *e. g.*



What is the use of a triple dot?

The third dot is half as long as the second; *e. g.*



If a note has four counts, how many counts would it have with a triple dot?

The first dot would have two; the second, one; the third, one half; all of which, added to the note, would make seven and a half.

What is the value of dots after rests?

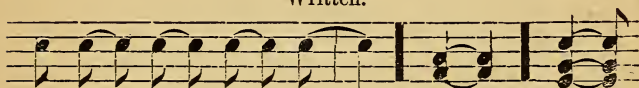
The same as after notes; *e. g.*



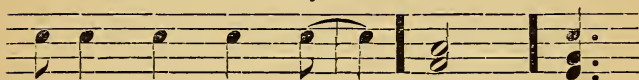
What is a tie or bind?

It is a curved line drawn over or under two consecutive notes which are of the same pitch, are on the same line or space and in the same part, to signify that the second one is not struck, but the first is to be held down the full time of both; *e. g.*

Written.



Played.



In the following example, the line *a* cannot be a tie, because it is over notes upon different spaces; *b* is a tie; *c* is a tie, although it is drawn past one note, because that intermediate note does not lie in the same part; *d* is not a tie because it connects notes upon different lines; *e* is a tie for the same reason that *c* is, and *f* is not a tie because the notes are not of the same pitch, although they are upon the same space, and also because another note intervenes in the same part:



In the following example there are two parts; the one with the stems turned up, is played with a strong touch; the one with the stems turned down, with a light touch. The two notes in each group which are turned up are common to both parts; as belonging to the lower part,

they cannot be tied because of intervening notes; the tie, therefore, only affects them as belonging to the upper part. As the finger cannot hold the first through the time of the second, having to strike the second as belonging to the lower part, the sound must be continued by the pedal:



CHAPTER III.

STAFF AND CLEFS.

What shows the difference in the pitch of sounds?

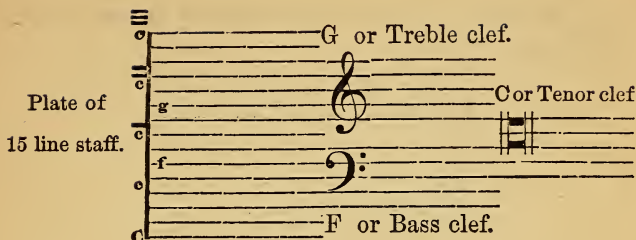
The position of the notes upon the staff.

What is a staff?

It consists of five lines and four spaces; each line and space is called a degree, and they are named from the first seven letters of the alphabet.

Were our notes always written upon a five line staff?

No; a staff of fifteen lines was formerly used.



This was inconvenient and difficult to read ; therefore, five lines were selected for the principal treble or high tones, and five for the principal bass or low tones ; so that now we use two staves of five lines each, one for each hand.

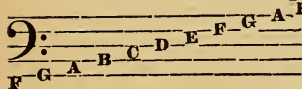
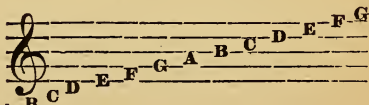
How do we know which of these lines were selected for the staves now in use ?

The same letter or clef remaining upon a line or space at the beginning of each staff, indicates which lines and spaces were selected.

How do we find the other letters of the staff ?

By counting up and down in alphabetical order ; *e. g.*

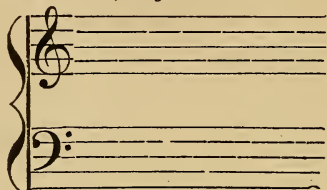
Treble or G clef.



Bass or F clef.

The G clef is generally used for the right hand or upper part, and the F clef for the left hand or lower part. This is, however, not always the case ; sometimes the left hand part is written on the G clef, and the right hand part on the F clef.

When played together, the staves are connected by a character called a brace; *e. g.*



How do we write notes, higher or lower than can be written on the staff?

By means of lines added above and below the staves, called ledger lines.

Lines added above the treble staff.



Spaces above the treble staff.



Lines and spaces below the treble staff.



Lines and spaces above the bass staff.



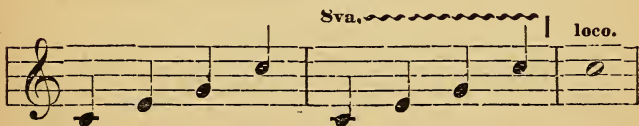
Lines and spaces below the bass staff.



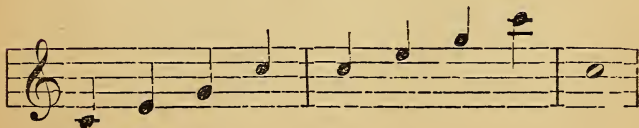
How are notes written which are to be played higher than the lines added above the treble staff?

By writing them an octave lower than they are to be played, and placing over them 8 va., which is the abbreviation of *Ottava Alta*, and means that the passage over which it is placed is to be played an octave higher than it is written, as far as the marks of continuation extend; *e. g.*

Written.

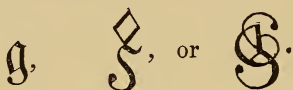


Played.



The word *Loco* signifies in place,—that the passage is to be played where it is written, and no longer, an octave higher.

Originally, letters were used in place of the clef characters; and it is considered quite probable that the characters now used are distortions of the original letters, because they have been found in forms quite different from the present ones, and bearing more resemblance to letters; *e. g.*, the G clef is found in ancient music in the following forms:



[See Weber's Musical Composition, vol. 1, page 39.]

How are the letters upon these staves applied to the Piano Keyboard?

The piano keys are named from the first seven letters of the alphabet, and the application of the staff is seen in diagram, close of chap. 1. It is here seen that the G, or treble clef note, is the first G above, or on the right hand side of the middle C of the keyboard. The F, or bass clef note, is the first F at the left of the middle C.

What is the meaning of the word *bass*?

It means low, at the bottom, basis, or foundation. It is the most important part in music, because it is the foundation of the harmony, and supports the whole composition. It should, therefore, be played with the greatest care and distinctness; nothing is more disagreeable or, musically speaking, more vulgar than the habit of striking the bass just in advance of the treble; and the player who does it should not be tolerated.

What is the treble?

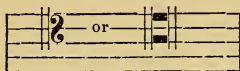
It is, generally, the highest part in the music and sings or plays the melody. There are exceptions to this, however, as the melody is, sometimes, found in the middle parts, and, sometimes, in the lowest part.

Have we any other clefs than these?

Yes, in old music, and, at the present day, for other instruments.

What is the most common of these clefs?

The C, or tenor clef, placed upon the fourth line and made thus:



It will be seen, by reference to the 15 line staff, which of the lines were selected to make this staff, and that the C which stands upon the fourth line is the middle C of the piano keyboard. The letters of this staff are as follows:



Is it necessary for a pianist to be able to read this staff?

It is not necessary for piano playing, but every musician should be familiar with it, that he may be able to execute on the piano, music which is written for other instruments in this clef.

Other lines than the fourth may be selected from the fifteen for this clef, but wherever it is found, that line upon which it stands is the middle C of the piano.

Where do we find more than two staves used?

In organ music we often find three staves; one for the right hand, one for the left, and one for the notes which

are to be played upon the pedals by the feet. Only the bass and treble clefs, however, are used.

What is meant by music written in score?

When the different parts which are to be played or sung together are written on different staves; *e. g.* The following four measures of music are written in score. The treble must be played highest; the bass, lowest; the alto and 2d treble, next below the treble; and the tenor must be transposed an octave lower and played with the left hand next above the bass. This manner of playing the parts places them at their actual pitch, because the male voice, being an octave below the female voice, sings the tenor really an octave lower than it is written when it stands upon the treble clef:

CHORUS, from the "Siege of Rochelle."

Tenor.

Alto.

2nd Treble.

Treble.

Bass.

The image shows a musical score for a chorus from the opera 'Siege of Rochelle'. The score is written for five parts: Tenor, Alto, 2nd Treble, Treble, and Bass. The music is in 3/4 time and G minor (three flats). The Tenor part is written on a treble clef staff, the Alto on a treble clef staff, the 2nd Treble on a treble clef staff, the Treble on a treble clef staff, and the Bass on a bass clef staff. The music consists of four measures. The Tenor part is written an octave higher than it would be sung. The Alto and 2nd Treble parts are written on staves that are positioned between the Treble and Bass staves. The Treble and Bass parts are written on staves that are positioned at the top and bottom of the score, respectively. The music is written in a style that is typical of 19th-century musical notation.

This manner of playing music written for several voices is called playing in dispersed harmony.

Is there any other way to play such music?

It is sometimes played in what is called close harmony, viz., playing the trebles, altos, and tenor with the right hand, and only the bass with the left hand. The treble must remain at its given pitch; the alto can easily be reached as it is written, but the tenor will sometimes have to be played an octave above the pitch on which it is sung, in order to be reached by the right hand. This manner of playing is used more upon the organ than the piano, owing to the necessity of using the hands for pulling stops and managing other peculiarities about the organ which do not exist on the piano.

What must be particularly remembered, whether the tenor is played by the right or the left hand?

That no part may be played above the treble, nor any part below the bass.

[This matter is treated more fully in works upon Church Music and Thorough Bass, which the teacher will recommend to the pupil when he considers it best for him to commence that kind of practice.]

When music is written in score, must it always be played in score?

Not always; a player who reads easily from score and understands harmony, may make an accompaniment which will have a finer effect with voices than to play the simple score

Is it necessary for a pianist to be able to play from score?

A person who cannot play any ordinary score at sight is not a well educated pianist. The pupil should commence this kind of practice while young, that, when he

is able to play solos, he can also accompany voices or other instruments.

[*Remark.* The author has often seen young ladies and gentlemen who could entertain their friends very handsomely with solo after solo upon the piano, who, when called upon to play the simplest chorus or piece of psalmody written in score, were obliged to confess their inability to read it, and leave the piano in mortification.]

CHAPTER IV.

TIME.

The idea of rhythm is a part of the nature of man. This is manifested in the steps and movements of even those who are entirely uncultivated; the savage and the child have a step, oftentimes as perfectly measured as the beat of the baton in the hand of the cultivated musician. This idea is so essential to a perfect organization, that when it is entirely wanting the mind is *so far* idiotic, whatever may be the development of its other faculties. Such a person should not study music with any expectation of playing, for, although rhythm is not an essential element of music, it is so necessary to its excellence that without it no music is perfect. The music which has the least rhythm is found in the church service, and is called chanting. J. F. Warner remarks that this “unrhythmical music sustains the same relation to

measured, rhythmical music, as prose does to poetry." The same author says, "it will be found universally true, that the higher is a man's native musical genius in the general, the more delicate, acute, and prominent is his appreciation of rhythm."

How is music written, to enable us to give it this symmetrical, rhythmical measurement?

It is divided into even portions by means of short lines drawn across the staff, called bars.

What do we call the music between any two consecutive bars?

A bar, or measure; and it must be remembered that we are to be the same length of time playing the music in every bar or measure, whether we find few notes or many.

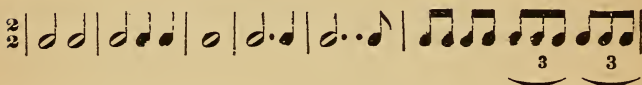
Some writers object to the use of the word bar with these two significations, viz., the line itself, and also the music between the lines, and maintain that only the word measure should be used with the latter signification. To this, we would say, as in case of different names of notes, intervals, &c., that, while the pupil should learn to express himself in correct musical terms, he should also remember that ideas are greater than the words which express them, and strive for intelligence and ability to understand musicians, whatever words they use. Especially is this necessary in America, where so many different languages are spoken, and where the musicians have been educated in so many different schools.

What is the use of the double bar?

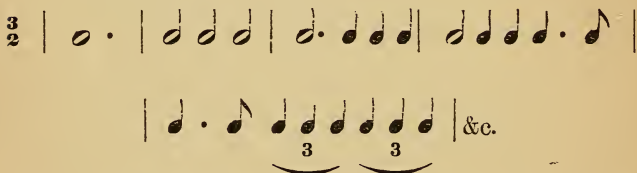
It answers the same purpose in music as the period in writing; it shows the end of a sentence—the completion of an idea. The double bar does not affect the rhythm, and may occur in any part of a measure.

What do the figures at the commencement of a piece of music show?

They show how much is contained in each measure; *c. g.* $\frac{2}{2}$ shows that there are two half notes or their equivalent in each measure;



$\frac{3}{2}$ shows that there are three half notes or their equivalent in each measure; *e. g.*



How many kinds of measure have we, differing radically from each other?

Two; even and uneven.

What are the different kinds of even measure?

Double measure, indicated by $\frac{2}{2}$, and all measures derived from double measure.

What are the different kinds of uneven measure?

Triple measure, indicated by $\frac{3}{2}$, and all measures derived from triple measure.

What are the measures derived from $\frac{2}{2}$?

$\frac{4}{4}$, which is sometimes marked C and means common time, $\frac{6}{4}$, $\frac{6}{8}$, $\frac{12}{4}$, $\frac{12}{8}$, $\frac{12}{16}$.

(fig. a.)

$\frac{2}{2}$ 

$\frac{4}{4}$ 

$\frac{12}{8}$ 

(fig. b.)

$\frac{2}{4}$ 

$\frac{4}{4}$ 

$\frac{12}{16}$ 

(fig. c.)

$\frac{2}{2}$ 

$\frac{6}{4}$ 

(fig. d.)

$\frac{2}{4}$ 

$\frac{6}{8}$ 

Figures *b* and *d* are, for all practical purposes of time, the same as figures *a* and *c*, although represented by shorter notes. They are also sometimes considered to require a more rapid delivery; this, however, depends upon other directions given by the composer.

We have also a species of even measure containing two whole notes, indicated by $\frac{2}{1}$, 2, $\mathfrak{2}$, \mathfrak{C} and called *alla-breve* measure. It is equivalent to two measures of $\frac{3}{2}$ or C measure, and consequently its subdivisions can be easily reckoned.

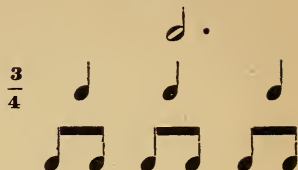
What are the measures derived from $\frac{3}{2}$ measure?

$$\frac{3}{4}, \frac{3}{8}, \frac{9}{4}, \frac{9}{8}, \frac{9}{16}.$$

(fig. e.)



(fig. f.)



(fig. g.)



(fig. h.)



(fig. i.)



What method have we of measuring our time and enabling ourselves to make the same notes always of equal length?

When playing, the scholar must count constantly the number of parts in each measure.

Which is better, to count mentally or aloud?

Always aloud, until the piece or study is learned. Some persons object to this, saying that, if a pupil has not sufficient idea of time to play without counting, he will not count evenly enough to make it any assistance. A teacher of any experience soon observes that, if a pupil has any idea of time at all, it may be greatly cultivated

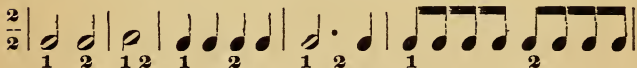
by counting with a teacher, or with a metronome first, and afterwards, alone, just as the ear for sound becomes more acute by listening to an instrument which is in perfect tune. A teacher should never excuse a pupil from counting aloud, until the piece or study is performed in exact time; and any pupil, who persistently neglects this duty, does so from indolence or perverseness, and he will find, sooner or later, that his execution is faulty in time, and, consequently, ruined. A distinguished writer says, "Of all the attributes which pertain to the musical art, rhythm should be the last to be sacrificed."

What should be especially guarded against in counting?

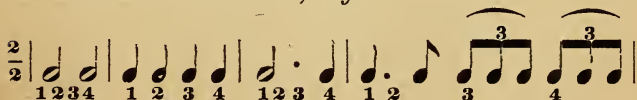
Singing the counts; because, in doing this, the pupil is very apt to sing as he plays and not to sing evenly, and to force his playing into the same time as his singing. He should speak his beats in a short, sharp, dry tone, striving to make them as even as possible, and taking his time slow enough to enable himself to bring in the notes of each count in the same time, whether they be few or many.

How is $\frac{3}{2}$ time counted?

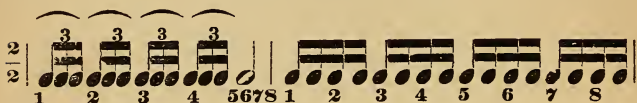
The half note may be taken for the beat note, in which case, the measure will be counted two; *e. g.*



Or, the quarter note may be taken for the beat note, and the measure counted four; *e. g.*

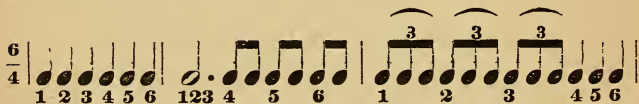


If the time is very slow, and the measure contains a great many notes, the eighth note may be taken for the beat note, and the measure counted eight; *e. g.*



How are $\frac{6}{4}$ and $\frac{6}{8}$ time to be counted?

If the movement is slow, they may be counted six; in $\frac{6}{4}$ time, by taking the quarter note for the beat note; *e. g.*



In $\frac{6}{8}$ time, by taking the eighth note for the beat note; *e. g.*

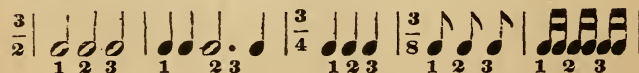


If these figures are given in a fast movement, the measures may be counted two, by taking a dotted half note for the beat note in $\frac{6}{4}$ time, and a dotted quarter in $\frac{6}{8}$ time; *e. g.*



How is triple time to be counted?

$\frac{3}{2}$, $\frac{3}{4}$, or $\frac{3}{8}$ measure is generally counted three; *e. g.*



How are measures containing nine parts to be counted?

$\frac{9}{4}$, $\frac{9}{8}$, $\frac{9}{16}$ time, if very slow, may be counted nine.

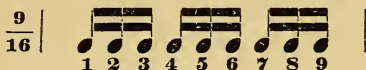
In $\frac{9}{4}$ time, by taking the quarter for the beat note; *e. g.*



In $\frac{9}{8}$ time, by taking the eighth for the beat note; *e. g.*



In $\frac{9}{16}$ time, by taking the sixteenth for the beat note; *e. g.*



All measures, however, containing nine parts, whether written $\frac{9}{4}$, $\frac{9}{8}$ or $\frac{9}{16}$, are generally counted three. In $\frac{9}{4}$ time, the beat note would be a dotted half, ♩. or, in other words, count one to three quarters; *e. g.*



In $\frac{9}{8}$ time, the beat note would be a dotted quarter; *e. g.*



In $\frac{9}{16}$ time, the beat note would be a dotted eighth; *e. g.*



An error is sometimes made by young pupils in attempting to count $\frac{6}{4}$ or $\frac{6}{8}$ measure as $\frac{3}{2}$ or $\frac{3}{4}$ measure. By an examination of figures *c* and *d*, it will be seen that $\frac{6}{4}$ and $\frac{6}{8}$ measure are derived from $\frac{3}{2}$ and $\frac{3}{4}$ measure, and must therefore retain the characteristics of double time, which can only be done by counting them two or six.

Six quarter notes in $\frac{3}{2}$ time, or six eighth notes in $\frac{3}{4}$ time, must retain the characteristics of triple time, which can only be done by counting them three. (See following figures.)

The figure displays musical notation for two time signatures: $\frac{6}{4}$ and $\frac{3}{4}$. Each time signature is shown in two rows. The first row for each time signature shows a single note (half note for $\frac{6}{4}$, quarter note for $\frac{3}{4}$) followed by a whole note (semibreve). The second row shows six notes: three quarter notes for $\frac{6}{4}$ and six eighth notes for $\frac{3}{4}$. Below the notes are counting numbers: 1, 2, 3 for the first three notes, and 4, 5, 6 for the next three notes in the $\frac{6}{4}$ row; and 1, 2, 3 for the first three notes, and 2, 3, 4 for the next three notes in the $\frac{3}{4}$ row.



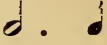

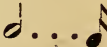

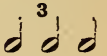
[*Remark.* With regard to speaking some syllable to the smaller divisions of the beats, the teacher will find that, while some pupils can play evenly four or more notes to one count, others need the assistance of counting in some manner the smaller subdivisions. There are some reasons pertaining to accent why it is better to divide the beats into half and quarter subdivisions, than to increase the number of beats.]

CHAPTER V.

EXERCISES IN TIME, BEATING TIME, &c.

[In the following exercises, the pupil must mark off every measure into regular beats, and be required to tell where every beat commences, and, if the measure contains many notes, he must divide each beat into half and quarter beats.]

Put upon the board or slate $\frac{2}{2}$ and write a succession of measures as follows, remembering that every measure must contain the value of two half notes:

One measure containing one note, - - $\frac{2}{2}$	
One measure containing two notes, -	
One measure containing two notes of unequal length, - - - - -	
One containing two notes of unequal length, and differing from the former.	
One containing two of unequal length, and differing from either of the others,	
One containing three notes, - - -	
One containing three even notes, - -	

One containing three notes and one dot; one, three notes and a double dot; one, three notes and a triple dot; three notes and a rest; three notes and two rests; four

even notes; four notes and one single dot; four notes and triple dot; five notes; five notes and one rest; six notes; seven notes; eight notes; nine notes; twelve even notes; one sextole, one triplet, and one half note.

Place upon the board $\frac{3}{2}$, and write a succession of measures as follows, remembering that each measure must contain the value of three half notes:

A measure containing one dotted note and nothing else; three even notes; four notes; five notes; six notes; seven notes; eight notes; nine even notes; ten notes; eighteen even notes; one sextole, one triplet and two quarter notes; six notes, three of which are dotted.

Place upon the board $\frac{6}{4}$, and write a succession of measures as follows, remembering that every measure must contain the value of six quarter notes:

One measure containing one note and a dot; two notes and two dots; eighteen even notes.

Place upon the board $\frac{9}{8}$, and write a succession of measures as follows, remembering that every measure must contain the value of nine eighth notes:

One measure containing three even notes; nine notes, three of which are dotted; twelve notes, six of which are sixteenths, and three are dotted eighths.

[When the class have written these exercises, if they still hesitate as to the value of any note or group of notes, such as triplets or sextoles, any dot or rest, the teacher may invent more exercises of the same kind for them, and, by no means, leave this chapter until every pupil can analyze the time of any measure of music, however complicated.]

These exercises will be of more service in teaching pupils to read music understandingly in point of time, than the mere playing of hundreds of pages in the ordin-

ary, careless manner of pupils who do no more than play the majority of the notes, without the least idea of apportioning to each beat its exact value in notes or rests. Let it be remembered that pupils should analyze every measure of a piece or study which they intend to learn, before commencing to play it, or, at least, a sufficient number of them to prove their perfect understanding of the time. By an analysis of measures for purposes of time, we mean to designate how many notes or rests make the first beat, how many, the second, and so on through the measure.

What is meant by beating time?

In singing or in keeping time for others to play, we beat with the hand the number of parts in a measure, instead of counting them.

In double measure, we beat two, thus :

1	2	1	2
Down,	Up,	Down,	Up.

In $\frac{4}{4}$ measure, if beating four, thus :

1.	2	3.	4
Down,	Left,	Right,	Up.

In $\frac{4}{4}$ measure, if beating eight, thus :

1.	2.	3.	4.	5.	6.	7.	8.
Down,	Left,	Right,	Up,	Down,	Left,	Right,	Up.

In $\frac{6}{4}$ or $\frac{6}{8}$ measure, if beating six, thus :

1.	2.	3	4.	5.	6.
Down,	Down,	Left,	Right,	Right,	Up,
or					
Down(held two beats).Left,			Right,(held two beats).Up.		

In $\frac{6}{4}$ or $\frac{6}{8}$ measure, if beating two, thus :

1.	2.	3.	4.	5.	6.
Down,			Up,		

In $\frac{12}{8}$ or $\frac{12}{16}$ measure, if beating four, thus :

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Down,			Left,				Right,		Up,		
Down,	Down,	Down,	Left,	Left,	Left,	Right,	Right,	Right,	Up,	Up,	Up.

In $\frac{3}{2}$, $\frac{3}{4}$ or $\frac{3}{8}$ measure, if beating three, thus :

1.	2.	3.
Down,	Left.	Up,

In $\frac{9}{4}$, $\frac{9}{8}$ or $\frac{9}{16}$ measure, if beating three, thus :

1.	2.	3.	4.	5.	6.	7.	8.	9.
Down,			Left,			Up.		

In $\frac{9}{4}$, $\frac{9}{8}$, $\frac{9}{16}$ measure, if beating nine, thus :

1.	2.	3.	4.	5.	6.	7.	8.	9.
Down,	Down,	Down,	Left,	Left,	Left,	Up,	Up,	Up.

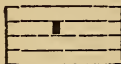
How is a rest for a whole measure made ?

In the same manner as a whole note rest, whatever be the value of the measure.

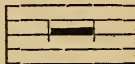


What indicates two measures' rest ?

The same heavy bar drawn from one line to the next.

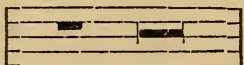


or



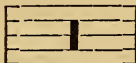
What indicates three measures' rest ?

A one-measure rest and a two-measure rest.



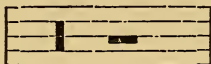
What indicates four measures' rest ?

The same bar drawn from one line to the next but one.



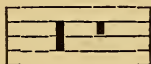
What indicates five measures' rest ?

One four-measure rest and a one-measure rest.

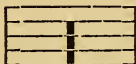


What indicates six measures' rest ?

One four-measure rest and one two-measure rest, or one bar drawn across two lines of the staff to the fourth.



or



What indicates seven measures' rest ?

One six-measure rest and a one-measure rest.



What indicates eight measures' rest :

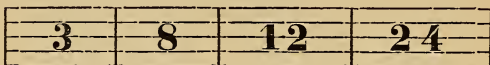
A bar from the top line of the staff to the bottom line.



[Let the class write upon the board all these rests and make combinations of them, to indicate nine measures' rest, ten measure's rest, eleven measures' rest, twelve measures' rest, and so on to rests for twenty measures.]

Are these characters always used to indicate silent measures?

No; figures are often used, particularly if there is a great number of silent measures; *e. g.*



How are several measures' rest counted?

The pupil will find, if he attempts to count twenty measures' rest, for example in three time, that he soon forgets how many measures he has counted; this difficulty is avoided by speaking the number of the measure which he is counting, in place of the word one; *e. g.*

| **one**, two, three, | **two**, two, three, | **three**, two, three, | **four**, two, three, | **five**, two, three, | **six**, two, three, | &c.



CHAPTER VI.



THE METRONOME—ITS USE.



[Classes of pupils under fourteen years of age, may omit this chapter until after they have learned the rest of the book, but they may be taught the use of the metronome at the piano, even when very young.]

In what has been said of time, we have spoken only of the comparative length of notes—of one note being shorter or longer than another; without anything more definite than this, the time in which a piece is played

must depend upon the time given to the beat note. Without some absolute guide, no two persons will execute the same piece in the same time.

Does it alter the effect of a piece of music to play it faster or slower?

Yes; the entire character of a slow piece would be ruined by playing it fast, and the most brilliant movement become stupid, if played too slow. To play the *Adagio* of Beethoven's Moonlight Sonate rapidly, would be simply a burlesque; it would be equally absurd to play a *Tarantelle* slowly.

What effect should always be studied in the execution of a piece?

The effect the composer intended.

Have we any means of knowing the exact time in which a composer intends his piece to be played?

Yes; by the metronome.

What is a metronome?

It is an instrument with an inverted clock pendulum, beating by clock machinery. The pendulum has back of it a scale of degrees showing how many times it will beat in a minute with the weight set at any degree; *e.g.*, if set at 60, it will beat sixty times in a minute; if set at 120, it will beat one hundred and twenty times in a minute. The composer designates the time in which his piece is to be played, by telling us at what degree to set the weight of the metronome for the beat note. Thus, the first movement of Mozart's Third Symphony in E flat maj., is marked $\frac{4}{4}$, *Adagio*, $\text{♩} = 60$, which means, that we are to set the weight at 60 and play the value of a quarter note to every beat. If we count four in this movement, we shall count with every beat of the metronome; if we count eight, viz., one count to an eighth note, we shall have two counts to every beat.

The next movement is marked $\frac{3}{4}$, *Allegro*, $\text{♩} = 60$. As a dotted half note is equal to three quarters, it is evident that when the weight is set at 60, a whole measure must be played to one beat. If, in this movement, we count three, we shall have three counts to one beat.

The next movement is marked $\frac{2}{4}$, *Andante*, $\text{♩} = 108$. The metronome will here beat four times in a measure, beating the value of an eighth. In so slow a movement, it is better to count four, which brings one count to every beat.

In Czerny's Exercises, op. 740, Book 1, we find C time $\text{♩} = 92$. This requires eight sixteenths to be played to one beat. As we generally count four in this time, we shall have a count to four sixteenths, and, consequently, two counts to each beat.

Who invented the metronome most in use?

Maelzel, an Austrian; and the M. M. which we see prefixed to the figures, mean Maelzel's Metronome.

Of what use is the metronome besides this?

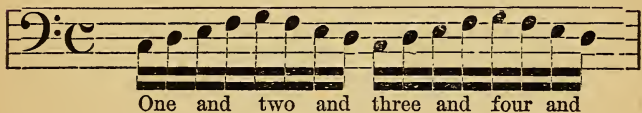
To assist a pupil in cultivating his idea of time, by counting with it while playing, particularly during the first year's practice.

We give here a peculiar manner of using the metronome for the purpose of cultivating an *imperfect ear*.

Take, *e. g.* Czerny's Exercises, op. 740, Book 1, No. 1; let the pupil play it through a few times, until he can play it slowly, but without stopping, lifting every finger to its proper height, and obeying every *f* and *p*. Then set the metronome weight at 80 and let him play one sixteenth to every beat, counting aloud, thus:

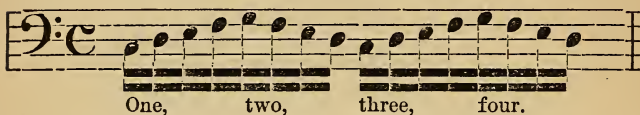


If he does this correctly the first time, once playing at this degree is sufficient; if he does not, then let him practice it until the count, the finger stroke and the metronome beat are every time exactly together through the entire study. When this is accomplished, move the weight one degree—to 84—and let him play it there; then one degree faster—to 88—and play it there; and so on, playing it all through at every degree down to 100. Then move the weight back to 50, and let him play two sixteenths to each beat, counting thus :



This is the same rapidity as one sixteenth at 100. When the notes are played evenly at this beat, let him play it once without the metronome, counting aloud and listening to the sound of his voice, to hear if he counts evenly. Then move the weight one degree—to 53—and play it there; then, again without the metronome, and so on down to 100, playing it at every beat, and for every time he plays it with the metronome, playing it once without it. From now, on, let him play it, alternately,

with and without it. When he has played two sixteenths at 100, set the weight again at 50, and let him play four sixteenths to each beat, counting thus:



Let him play it in this manner at each degree down to 100, remembering to play it every other time without the metronome. Now move the weight once more back to 50, and let him play eight sixteenths to each beat. He may count four, as before, or only two, speaking with the beat, and play it in this manner at each degree, down to 92, which is the required rapidity.

This takes much time, because, until the pupil strikes unhesitatingly every note in its time, he must not move the weight one degree. Let teacher and pupil remember that the object of all this practice is not merely to learn this one study, but to cultivate the ear for time; and that, when this study can be executed in even time throughout, without the metronome, any other study or piece of like difficulty can be executed as well.

The pupil should now take some different measure for this kind of practice; *e. g.* a *Tarantelle*, in $\frac{6}{8}$ time. Set the weight at 60, and let him play one eighth to each beat, observing carefully every mark of expression. When this is done, he may play it at each degree down to 120. Then move the weight to 40, and play three eighths to every beat, counting two, thus:



and play it in this manner at every degree down to 80. Now move the weight once more to 40, and let him play a whole measure to every beat, and play it in this manner at every degree down to 88, or 100, according as the piece is metronomized, remembering always to count aloud, and always to play the piece, at least every other time, without the metronome.

Not more than thirty minutes per day should be given to this kind of practice.

The author has known pupils whose natural idea of time was very imperfect, persist in this course of practice, until they could carry any ordinary *tempo* quite steadily.

For one who has a natural idea of time, this sort of metronomic practice is unnecessary.

Much has been said about the injurious effects of metronomic practice—that the player's time becomes stiff and mechanical, &c. These objections are invariably raised by those who have never used the metronome in this manner, and who, therefore, cannot speak from experience; nor can they speak from any extended observation, because the metronome has been so little used in this country, that they have had no opportunity to observe its effects upon large classes of pupils.

No one will dispute the fact, that, where there is one player in a promiscuous class of one hundred, whose time is so perfect that it is stiff and mechanical, there are ninety-nine who cannot, even after years of practice, play steadily five pages of any *tempo* which contains a variety of notes. This, every pupil should be able to do, and until he can, there is little danger of his time becoming too rigidly exact.

These objectors also say, that a scholar soon becomes so accustomed to playing with it, that he cannot play without it. This is impossible, if the teacher obeys the directions laid down in this chapter. The instrument must be used as an *aid*, to teach the player to *count evenly*, and when this object is accomplished, there is no further need of it; and it should no longer be used except as an occasional test.

Passages which are to be accelerated or retarded should first be learned in perfect time, then the metronome must be closed and the pupil be required to obey every change of time.

In long *cadenzas* composed of little notes which are not barred off into measures, this rule cannot be observed. The only guide we have, in such passages, is the comparative length of the notes, and the written directions; *e. g.*, if a *cadenza* opens with 32d notes marked *presto*, they must be played rapidly as possible; if these notes are followed by sixteenths, the sixteenths must be played only half as fast; if there comes a quarter note, it is as long as eight of the first 32d notes, the pupil observing closely the *ritards*, *accelerandos*, and pauses, which generally occur in such passages.

If a piece is a transcription of a song, in what time should it be played?

As nearly as possible in the same time in which the words would be sung.

Chapter XVIII contains a table of the metronomic beats of several common movements with which every player should be familiar. After playing these movements a few times with the metronome, the pupil will have no difficulty in taking them correctly without the metronome.

CHAPTER VII.

ACCENT—REGULAR AND IRREGULAR SYNCOPATION.

What is accent in music ?

Particular strength given to particular tones.

Is a proper accent a matter of importance in music ?

It is of precisely the same importance as in speaking or reading. "The ear," it is said, "is unfitted to receive many sounds of equal force in succession." Whatever this may be construed to mean, we know it to be a fact, that a succession of sounds totally unaccented—monotonous in point of power—is exceedingly disagreeable, although it may constitute a melody which, if properly accented, would be attractive.

When a player commences a piece, it is his accent which at once tells us in what measure he is playing ; and, until this is clear to us, we cannot comprehend the piece any more than we can understand a speaker who talks rapidly for moments without any accent, or any division of his words into sentences.

It is the accent, more than anything else, which makes the same piece sound so differently when played by different persons. Indeed, it is not too much to say that the same piece is never rendered twice exactly alike,

because of the different accent of different players, and the different accent of the same player at different times.

How many kinds of accent have we?

Two; regular and irregular, or rhetorical.

What is meant by regular accent?

That which falls naturally upon the same parts of all measures which are in the same kind of time.

What parts of the measure are accented in double time?

If the measure contain two undivided half notes, the first is accented; *e. g.*

(a)



If the measure contain quarter notes, these subdivisions are marked with a slight accent; *e. g.*

(b)



In the above example, the first quarter note is the strongest, being the first division of the strongest accent; the third quarter is stronger than the fourth, being the first division of the lighter part of the measure; but the third quarter is not so strong as the first, because the first division of a strong part of a measure is stronger than the first division of a light part of a measure. If these divisions become still smaller, the *first* part of every subdivision is always more important than the other parts of the same subdivision; *e. g.*



In the last subdivision into eight notes, the first is the strongest, the fifth next, for the same reason that the third quarter in ex. b is next in strength to the first; the third is stronger than the fourth, and the seventh is stronger than the eighth.

How many accents has $\frac{12}{8}$ measure?

Four, which are upon the first, fourth, seventh, and tenth parts of the measure; *e. g.*



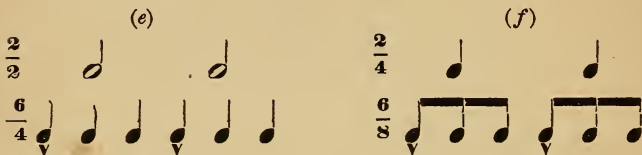
The reason for this number of accents, and for their comparative power, is obvious from what has been said of other subdivisions.

What is the accent of $\frac{12}{4}$ measure?

The same as $\frac{12}{8}$ measure, remembering that the beat note is a quarter note, whereas the beat note of $\frac{12}{8}$ measure is an eighth note.

What is the accent of $\frac{6}{4}$ and $\frac{6}{8}$ measure?

In the chapter on time, these measures are shown to be derived from $\frac{3}{2}$ and $\frac{3}{4}$ measure; their accent, therefore, will be as in fig. *e* and fig. *f*.



In both these examples, the first is stronger than the second or the third; the fourth is stronger than the fifth or the sixth.

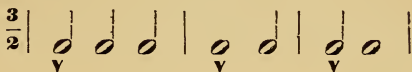
If these are still subdivided, the accent will be like two sextoles; *e. g.*



We sometimes see the metronomic beat of $\frac{6}{4}$ measure given to the half note; *e. g.* $\text{half note} = 80$. This always means the dotted half, and should be written thus, $\text{dotted half} = 80$. The metronomic beat of $\frac{6}{8}$ measure is sometimes given to the quarter note, thus, $\text{quarter note} = 80$; This means dotted quarter, and should be written thus, $\text{dotted quarter} = 80$. The reason of this is, because the accent of double measure must be preserved, which would be impossible if the metronome beat three times in a measure. The writers metrônimize them according to the double measures from which they are derived, because they wish the same effect produced by the accent, as if they were written $\frac{3}{2}$ or $\frac{3}{4}$ time, and each half or quarter note divided into a triplet.

What is the accent of triple measure?

If the measure contain nothing shorter than half notes, the first only is accented; and, in all cases, the *first beat in the measure has the strongest accent*.



If the half notes are divided into quarters, the first quarter is stronger than the second, the third is stronger than the fourth, and the fifth is stronger than the sixth; *e. g.*



What is the accent of $\frac{9}{4}$ measure?

It has three accents; on the first, fourth, and seventh beats; *e. g.*



Are the accented parts of a measure always to receive a stroke more forcible than the unaccented parts?

They are not; a continual, strict observance of the natural accent, regardless of the higher, rhetorical accent, is only equaled in its disagreeable effects by music without any accent. Dr. Weber says of the natural accent, "It is rather an *internal* weight which our rhythmical feeling spontaneously gives to every heavy part. Still, however, so much as this is true, that a kind of

shock—a revulsive sensation is produced in one's feelings, if, *on the contrary*, a *lighter part* is rendered more prominent, by a greater external strength of tone, than a part that is internally more heavy."

What is meant by irregular, or rhetorical accent?


Any accent which reverses or, in any way, disturbs the regular accent.

What is the effect of Crescendo, abb. cresc^o, or indicated thus,

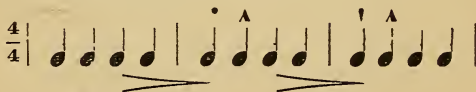


To increase little by little in power. This may entirely destroy the regular accent; *e. g.*

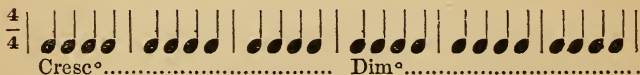


What is the meaning of Diminuendo, abb. dim^o, or indicated thus,  ?

To play gradually lighter and lighter; this may also destroy the natural accent; *e. g.*

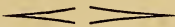


Sometimes the cresc^o and dim^o do not wholly destroy the natural accent; particularly is this the case when they are long; *e. g.*



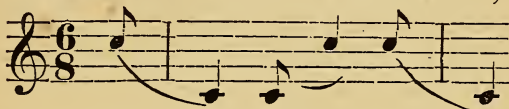
In the above example, the regular accent is slightly observed, but each measure as a whole, is louder than the one before it until the dim^o; then each measure as a whole, is lighter than the one before it.

What is the perfect swell ?

It is a cresc^o, immediately followed by a dim^o, and is indicated thus, 

What is the effect of a slur, placed over or under two notes ?

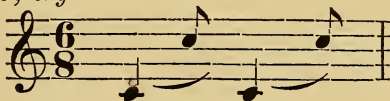
The first is struck strong and held its whole time ; the second is struck lightly, and the finger raised immediately ; this mark often inverts the natural accent ; *e. g.*



In this example, the first note, which is naturally unaccented, becomes accented by the slur, while the second, which is naturally the strongest note in the measure, becomes lighter than the first. The natural, comparative power of the third and fourth, and of the fifth and sixth, are also reversed by the slurs.

In what case does the slur over two notes make the natural accent stronger, instead of reversing it ?

When it is drawn from a stronger to a weaker part of the measure ; *e. g.*



What is the meaning of *Forzando* ?

It signifies that the note is to be struck with an accent ; the strength of the accent must be proportioned to the power of the passage in which it occurs. It is abbreviated *fz*, or indicated thus, > < ^ v

What is the meaning of *Sforzato* ?

It has the same meaning as *Forzando* ; and is abbreviated *sf*, or *sfz*, or indicated thus, > < ^ v

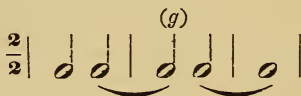
What is the meaning of *Rinforzando*?

It signifies that several notes in succession are to be rendered with a strong accent. It is abbreviated *rfz.*

We have many other marks indicating irregular accent, which may be found by reference to a musical dictionary.

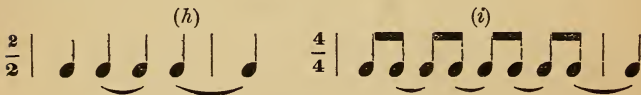
What is a syncopated note?

Dr. Weber says, "It is a note which commences on a light, or unaccented part of the measure, or on a light subdivision of a part of the measure, and continues on, without interruption, through the following heavier part of the measure, so that the last part of the note falls on a heavier portion of the measure than the first part;" *e.g.*



In this example, the second note is syncopated, because it commences on the second beat which is unaccented and continues, by reason of the tie, through the first beat in the next measure, which is accented. The fourth note is syncopated for the same reason.

Examples of notes syncopated by ties in lighter subdivisions.

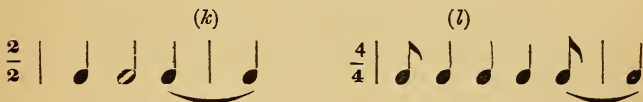


In example *h*, the second note is syncopated, because it commences upon the second beat which is unaccented and continues through the third beat which is accented. The fourth note is syncopated, because it commences on the fourth beat which is unaccented and continues through the first beat in the next measure which is accented.

In example *i*, the second note is syncopated, because it commences on the second division of the first beat and continues through the first division of the second beat; and it has been given as a rule of accent, that the *first* division of a beat is stronger than the second. The fourth note is syncopated, because it commences on the last half of the second beat and continues through the first half of the third. The sixth note is syncopated, because it commences on the last half of the third beat and continues through the first half of the fourth. The eighth note is syncopated, because it commences on the last half of the fourth beat and continues through the first beat in the next measure.

Are notes syncopated without ties?

They are; *e. g.*



It will be seen by comparing examples *k* and *l* with examples *h* and *i*, that they are in effect precisely the same; in example *h*, the tie makes the second note the same length as the half note in example *k*; in example *i*, the tie makes the second note the same length as the second note in example *l*, and so on.

[The teacher should here oblige the class to write upon the board examples of syncopation, until he is sure that every member understands the matter perfectly. He should also give them puzzles in syncopation to work out alone and bring to the class for examination; *e. g.*, a measure in $\frac{6}{4}$ time, containing eight notes, five of which shall be syncopated.]

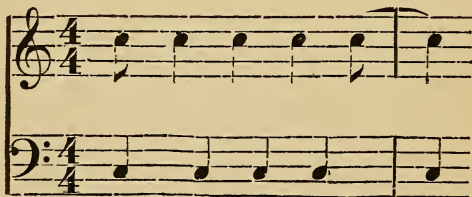
Should a syncopated note be accented?

It should; because it takes the accent of the stronger part of the measure into which it continues; the pupil must remember, therefore, that syncopation *always inverts the accent*.

What is the meaning of the word syncopation?

It is from a Greek word which signifies cutting in two, or cutting in pieces; applied musically, it means that the duration of the tone is broken in upon by the entrance of a heavier part of the measure.

In music of two or more parts, we sometimes find only one part syncopated, while the other parts have notes which are struck on the entrance of the heavy parts of the measure; *e. g.*



Whether this is the case, or whether all parts are syncopated, makes but little difference in the effect, because every beat of time is so felt by both player and listener, that, in either case, the syncopated note is as effectually broken.

CHAPTER VIII.

PEDALS.

What is a pedal ?

Pedal is from a word which signifies foot, and, in musical instruments, always refers to something used by the foot. On the organ, the pedals are a set of keys to be played by the feet. On the harp, the pedals are used to change the scale or key in which the person is playing.

How many pedals has the piano ?

Two ; the soft pedal, used by the left foot, and the loud pedal, used by the right foot.

What is the effect of the soft pedal on a square piano ?

It shuts pieces of felt upon the strings, thereby softening the sound ; but the mechanical arrangement is such, that it cannot be relied upon to produce an even quality of tone throughout. Therefore, the soft pedal of a square piano should be rarely used.

What was the effect of the soft pedal on grand pianos in former times ?

The hammers of the old grand piano struck two strings ; when the soft pedal was put down, it shifted the keyboard to the right, causing the hammers to strike only one string.

What was the mark for the use of this pedal ?

Una Corde, abbreviated *U. C.*, meaning one string.

What is the effect of the soft pedal on the grand piano of the present day ?

The grand piano now has three strings for each hammer, and the soft pedal shifts the keyboard, allowing the hammers to strike two strings, instead of one, as in the old grand. But the mark *U. C.*, is still retained to signify this pedal.

What would now be more correct than *Una Corde* ?

Due Corde, which signifies two strings ; this is occasionally seen, but not often. The pupil must, therefore, remember that both *Una Corde* and *Due Corde* mean the soft pedal of the grand piano ; but, when playing a square, if the soft pedal is clear and distinct, it must be used at the occurrence of either of these marks.

What other marks indicate the soft pedal ?

Pianissimo, abbreviated *pp*, or an exaggerated *pianissimo*, abb. *ppp*, indicate this pedal for both grand and square.

If the soft pedal produces a smothered, blurred sound in the square, then the pupil must use the most delicate possible touch without the pedal.

What direction have we for letting up this pedal ?

When it has been put down at *Una Corde* or *Due Corde*, it must be raised at *Tre Corde*, which signifies three strings, or at *Tutte le Corde*, which signifies all the strings. When it has been put down at *pp*, or *ppp*, it must be raised at *forte*, abb. *f.*, or at *fortissimo*, abb. *ff*, or at *fff*, which is an exaggerated *fortissimo*.

What is the meaning of *Una Corde Sin al fin* ?

Soft pedal to the end.

What are the dampers of the piano ?

They are a set of felts which, when the fingers are lifted from the keys, shut instantly upon the strings to stop their vibration.

What is the effect of the loud pedal ?

It raises the dampers from all the strings and holds them off, while it remains down ; therefore, all the strings, struck while that is down, go on vibrating for many seconds.

May this pedal be much used ?

It can only be used with the greatest care, because, after playing perhaps twenty measures with it down, every string struck during those measures is still sounding, almost as distinctly as if all had been struck at one blow. The consequence of this would, generally, be intolerable discord. The best way to appreciate exactly the effect of this pedal, particularly in a run, is, to let seven persons sing in succession each, one sound in the scale, and each continue his tone, till all have sung, and then go on sounding together a few seconds. Let pupils try this experiment, and they will never afterwards hold down the loud pedal while playing scales.

What is the only safe rule to be observed in the use of this pedal ?

The pupil had better not use it at all, unless it is marked by the teacher or composer, until he has sufficient knowledge of chords, to know what sounds may properly be sustained through each other.

No part of piano playing is so neglected as pedal effects, while nothing will so completely ruin a piece, otherwise finely executed, as an improper use of this, so called, loud pedal.

By what more correct name is this pedal sometimes designated?

Damper pedal.

When is it absolutely necessary to use this pedal?

When we wish to sustain a sound after the finger leaves the key. By means of this pedal, we can prolong the tones of a melody in such a manner that we have the effect of a voice singing with a *stuccato* accompaniment. Many fine effects may be produced by a proper use of the two pedals, particularly on a grand, but these can only be taught by a teacher at the piano.

A careful study of the manner in which the pedals are used in "Thalberg's Art du Chant," is of great benefit, even to a good player.

It will be seen from this that the loud pedal is not used so much for power as for *prolonging sounds*; therefore, it is used just as much, when the soft pedal is down for a pianissimo passage, as in the loudest fortissimo.

What mark indicates the use of this pedal?

Ped.

What tells us to let it up?

Either one of the following characters : \oplus \ast \uparrow .

What is the meaning of *Con Sordini*?

With the dampers.

What is the meaning of *Senza Sordini*?

Without the dampers.

What is the meaning of *Il Pedale del Piano*?

The soft pedal.

What is the meaning of *Senza Pedale*?

Without the pedal.

Other marks referring to the pedals will be found in a musical dictionary.

CHAPTER IX.

TOUCH.

What is meant by touch?

This word has two significations; first, the resistance of the piano keys when struck. If the resistance is strong, we say the instrument has a hard touch; if the resistance is slight, we say it has a light touch; if the keys spring back instantly when left, we say it has an elastic touch, &c.

Secondly, the word touch refers to the manner of striking the keys and of raising the fingers from the keys.

Is the touch of the pianist a matter of importance?

It is; a man may study and practice many years, acquire much knowledge, great execution, and be able to read with ease; but, if he does not acquire a touch which can be, at will, delicate and sympathetic, or brilliant and powerful, he will not be an acceptable player. Many persons think themselves fine pianists, simply because they have practiced scales and exercises for years; such persons have only gathered together the *materials* for an elegant building; the edifice itself, in its grace and beauty, has yet to be reared.

When should a pupil commence the study of touch?

All different kinds of touch, and all possible shading should be practiced in the first finger exercises, as soon

as the pupil has acquired a pure *legato* touch ; as, thereby, not only the *ability* to play in proper style is acquired, but a *habit* of obedience to all marks of expression is formed early in the career of the student.

What is meant by a *legato* touch ?

Holding each key *firmly down without any relaxation of the pressure, until the next key is struck*. When the second key is struck, the first must be instantly raised, that the sound of the first key may not continue through that of the second. This is the *most important* law of piano playing ; and the pupil who has not learned to obey it, can play *nothing* well, no matter how easily he can read, or how many pieces he has learned, because his execution is *false* from the *foundation*. It was this touch in its perfection, which produced that singing tone, so remarkable in the playing of Gottschalk and Thalberg.

Should the pupil listen to his own playing ?

Always ; that he may know whether one sound sings until the next one comes, or whether the sound is broken between the letting up of one key and the putting down of the next. The piano is the most difficult instrument upon which to produce this singing effect ; therefore, it should be the earlier and more carefully studied.

What is especially recommended as an aid in this particular study ?

To listen often to fine singing and good violin playing. The great Thalberg studied singing five years under the best Italian masters, simply to enable himself to sing more effectually with his fingers upon the piano.

What is meant by a *legatissimo* touch ?

It consists in holding a key which has been struck, after the next one or more is down, thereby continuing

the sound of each one through one or more of the following sounds. This should not be attempted until the pupil has acquired a perfect *legato* and, also, a sufficient knowledge of harmony, to know what sounds may properly be continued through each other.

What is a slur?

It is a curved line drawn over or under two or more notes, and signifies that they are to be played *legato*.

What is meant by a *staccato* touch?

It consists in leaving the keys as soon as touched; the time which belongs to such notes passing in silence, after the key has been struck.

How is this touch indicated?

Sometimes by the word *staccato*, or its abbreviation *stacc.*, but, generally, by round dots or pointed specks placed over or under the notes. Those marked with round dots are played *mezzo staccato*, or half *staccato*, and such are not left so quickly as those marked with pointed specks; *e. g.*



Mezzo Staccato.



Pure Staccato.

When a passage is marked with both dots and slurs, how is it to be played?

The keys are held almost their whole time, the finger being raised from one, only just in time to strike the next, because a slur indicates a *legato* touch, and, therefore, the passage must not be quite *staccato* nor perfectly *legato*; *e. g.*



When the same key is struck more than once, how is it necessarily played?

More or less *staccato*, because we cannot strike a key which is already down, until we have first let it up.

Another instance, in which a note must be slightly *staccato*, is when the next note to be struck is so far away that it cannot be reached, without leaving the note held. Even in this case, the pedal will sustain the sound if necessary.

What does *staccatissimo* mean?

It is the superlative of *staccato*, and means that the notes are to be left as quickly as possible.

What mark is this, $\overset{\cdot}{\phi}$, and what does it signify?

It is a pressed *mezzo staccato*, and implies that the note over which it is placed should have a broad tone; it is sometimes made thus: $\overset{\cdot}{\phi}$.

Where do we find the *legato* and *staccato* played at the same time with different fingers of the same hand, or *legato* with one hand and *staccato* with the other?

In playing melodies which are written with an accompaniment; the melody will often be *legato* with *staccato* accompaniment, or sometimes the melody will be *staccato* with a *legato* accompaniment. To play well a song and its accompaniment should be the study of every pianist, whatever touch is given for them. The song must be heard as distinctly as the voice of a fine singer; it is quite as unbearable to hear a player drown, with his clumsy accompaniment, the song he sings with his fingers, as the one he sings with his voice.

Thalberg tells us that "one of the first conditions necessary to a breadth of execution, a clear sonorousness,

and a great variety in the production of tones, is to possess in the fore-arm, the wrists, and the fingers, as much flexibility as the singer possesses in his voice." He also insists in the same work that, "young performers apply themselves, not only to the mechanical execution of written notes, but that they study the signs of expression which serve to complete and translate the composer's thoughts; signs which are, to a musical composition, what light and shade are to a picture. In either case, if these indispensable accessories are omitted, there no longer exists either effect or contrast, and the eye, like the ear, is soon fatigued with the same coloring, and the absence of variety."

CHAPTER X.

NATURAL SCALE.

What is the musical scale?

It consists of the seven tones or degrees and the octave to the first, proceeding by a certain order of intervals.

What is an interval?

It is the difference between any two tones or degrees of the staff.

What does the word scale mean?

It is from the Latin word *scala*, which means ladder; therefore, the scale may be regarded as a musical ladder;

the sounds may be considered the rounds, and the intervals, the spaces between the rounds.

What are these scale intervals called ?

The longer ones are called steps or tones, and the shorter ones, half steps or semi-tones. There is this objection to the use of the words tone and semi-tone, that tone means sound, and it produces confusion to use the same word with the two different meanings, viz., sound itself, and the difference between sounds.

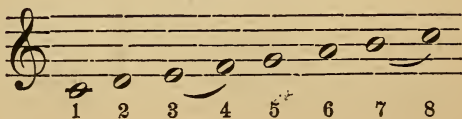
How do we distinguish steps from half steps on the piano ?

A half step lies between one key and the next, whether it be a white key or black one ; *e. g.*, from *c* to the black key on the right of it, is a half step ; from *e* to *f*, and from *b* to *c*, are half steps. A whole step consists of two half steps ; from *c* to *d* is a whole step, because it is one half step from *c* to the black key at its right, and another from that black key to *d*. From *e* to the black key at the right of *f* is a whole step, because it is one half step from *e* to *f*, and another from *f* to the black key at its right.

Where do we first begin the scale ?

On C ; the scale of C is called the natural scale, and its intervals are all whole steps, except between the third and fourth and the seventh and eighth, which are half steps, making in the scale five whole steps and two half steps.

Scale of C.

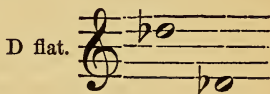
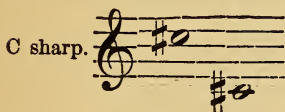


What are the intermediate sounds named which lie between the sounds which are separated by whole step intervals?

They are named from the letter above or below them; if, from the letter above, they are called the flat of that letter; if, from the letter below, they are called the sharp of that letter; *e. g.*, the key between *c* and *d* may be called either *c* sharp or *d* flat.

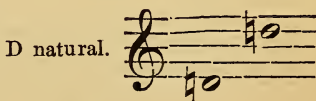
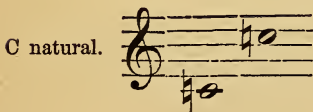
What characters are used to designate these sounds?

A character called a sharp, or a character called a flat, is placed close on the left side of the note from which it takes its name, on the same line or space of the staff as the note; *e. g.*



When one of these intermediate sounds has been used, and we wish again to use the regular degree of the scale, what character indicates the change?

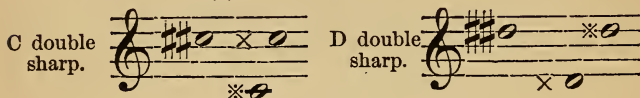
A natural; and it takes the place of the sharp or the flat; *e. g.*



A natural then, evidently, sometimes raises and sometimes lowers a tone; *c*, when made sharp, was raised one half step; the natural lowers it by restoring it to its former position; *d*, when made flat, was lowered a half step; the natural, by restoring it to its former position, raises it.

What is the effect of a double sharp?

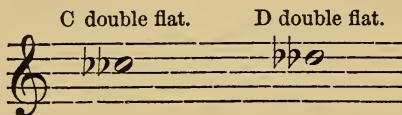
It raises a tone two half steps, while the note still remains upon the same degree of the staff. The character is made thus, $\sharp\sharp$, \times , or \ast , *e. g.*



In the above example, *c* would be played *d*, because twice sharped; *d* would be played *e* for the same reason.

What is the effect of a double flat?

It lowers a tone two half steps, while the note remains upon the same degree of the staff; it is made thus, $\flat\flat$ *e. g.*



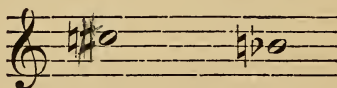
In the above example, *c* would be played on *b* flat; *d* would be played on *c*.

What character contradicts the double accidental?

A natural.

How is a single sharp or flat canceled after a double one?

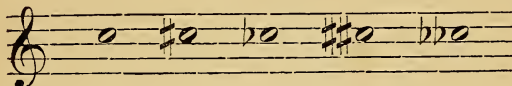
By a natural and a sharp, or a natural and a flat; *e. g.*



In the above example, *c* is once sharp, *b* is once flat. The natural contradicts one of the sharps or flats which were indicated by the double accidental, and the sharp or flat which is with it, signifies that one still remains.

What name is given to any character which alters a tone from its pitch in the natural scale?

An accidental; by means of these accidentals, one note may be made to represent five different sounds; *e. g.*



How long does the influence of an accidental last?

Through the measure in which it occurs; in other words, a bar cancels an accidental.

Is there any exception to this rule?

Yes, if the last note of a measure is affected by an accidental, and a note of the same degree begins the next measure, and, in the second measure, the chord, in which the note occurs, is in the same harmony as in the first, then the accidental continues into the second measure; by this exception, an accidental might last through several measures, but rarely does. We sometimes find accidentals canceled by the characters, several measures after they occur, when they have already been canceled by the bars. Such canceling characters are unnecessary.

Are we obliged to begin the scale upon any particular letter of the staff?

No; we may begin it upon any letter, or its sharp or flat, if we make the sounds proceed by the same order of intervals as in the natural scale.

Is there any reason why the scale of C is really any more the natural scale than a scale commencing upon any other degree of the staff?

No; the proper order of intervals makes the scale of nature, wherever it is commenced; but the piano is constructed with reference to the scale of C as the natural

scale, and therefore this scale can be played upon it without altering any of its sounds by means of sharps or flats.

What other names are sometimes given this scale?

The normal, and the typic scale.

What does normal mean?

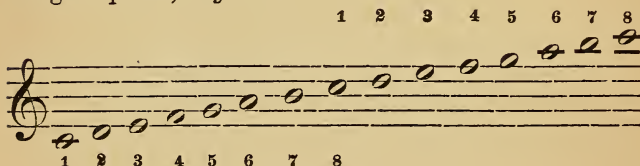
Regular, according to an established law or principle.

What does typic mean?

Representing something by a form or model; in this application, it means that the scale of C is a model or pattern for all the other scales.

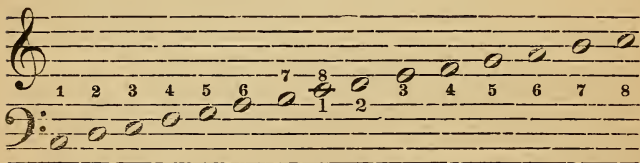
How is this scale repeated higher?

By considering the eighth sound as the first sound at a higher pitch; *e. g.*



How do we repeat it lower?

By considering the first sound as the eighth of the scale at a lower pitch; *e. g.*



What is the compass of tones of the human voice?

A good natural voice, or one highly cultivated, can sing three octaves of the scale.

What is the highest tone ever reached by the human voice ?

Dr. Marx, in his "General Musical Instruction," testifies to having heard a girl of twelve years reach the four lined e ($\overline{\overline{e}}$), the seventh space above the G staff, with clearness and purity of intonation ; and her lowest note was the little e , fourth space below the G staff, making a compass of four octaves. No other instance of such compass is known. Jenny Lind's and Nilsson's highest tone is the three lined e ($\overline{\overline{e}}$) ; Madame Malibran's was three-lined f sharp ($\overline{\overline{f\sharp}}$).

What is the aggregate sound of nature ?

That sound which is heard in the roar of a distant city or the waving foliage of a large forest, is said to be a tone of a single, definite, appreciable pitch, and is held to be the middle f of the piano-forte, or the small, once marked f (\overline{f}). This sound may, therefore, be considered the keynote of nature.

How did we first obtain a knowledge of this scale ?

It was discovered by Pythagoras, while calculating the vibrations of strings of different lengths. Its order of intervals is a principle in nature, not an arbitrary creation of man.

How does it happen that this scale has C for its first letter, when it would seem more natural to call its first sound A ?

The ancients named the lowest letter used in their music A, simply because it was the lowest or first letter ; this is the A now found in the first space of our bass staff. Afterward, much lower sounds were used, but this A, while it still retains its name, ceased to be the point from which they commenced to reckon.

CHAPTER XI.

INTERVALS.

[Very young pupils should become familiar with thirds and fifths, as a knowledge of these intervals is necessary to enable them to transpose the major scale, and to form the minor scale; but they may omit the study of the other intervals until they are eleven or twelve years of age.]

How are the intervals of the scale named?

According to the degrees of the staff or the number of letters contained.

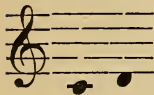
Are intervals reckoned upwards or downwards?

Always upwards, unless the contrary is expressed.

INTERVALS OF THE SCALE.



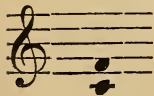
A Prime; because it consists of one letter, viz., c.



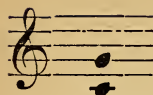
A Second; because it consists of two letters, viz., c, d.



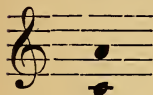
A Third; because it consists of three letters, viz., c, d, e.



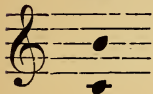
A Fourth; because it consists of four letters, viz., c, d, e, f.



A Fifth; because it consists of five letters, viz., c, d, e, f, g.



A Sixth; because it consists of six letters, viz., c, d, e, f, g, a.



A Seventh; because it consists of seven letters, viz., c, d, e, f, g, a, b.

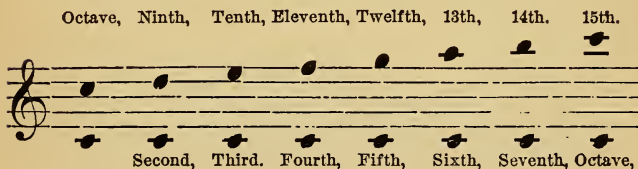


An Eighth or Octave; because it consists of eight letters, viz., c, d, e, f, g, a, b, c.

How are intervals reckoned when they are greater than an octave?

The same as if both notes were in one octave.

EXTENDED INTERVALS.



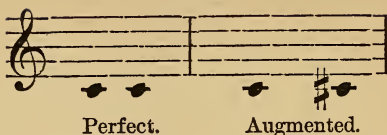
If *c c* is a prime, is the interval *c* to *c*[♯] also a prime?

It is, because it consists of only one letter.

It follows then that there are two kinds of primes; what names are given them?

The perfect prime, which is a strict unison, and the augmented prime, which consists of one half step.

PRIMES.



If we strike the same keys which make an augmented prime and call them *c*, *d♯*, is the interval still a prime?

No, because a prime must consist of *one letter*, and *c d♯* are two letters.

[Let class write perfect and augmented primes to *c*, *d*, *e*, *f*, *g*, *a*, *b*.]

If it is a second from *c* to *d*, is it also a second from *c* to *d♯*?

It is, because it consists of two letters.

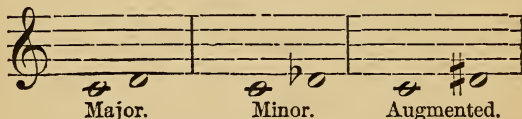
Is it also a second from *c* to *d♭*?

It is, because it consists of two letters.

It follows then that some seconds are larger than others; how many kinds of seconds are there?

Three; the major second, consisting of two half steps; the minor second, of one; and the augmented second, of three.

SECONDS.



If we strike the same keys which make an augmented second and call them *ce♭*, is the interval still a second?

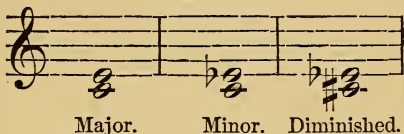
No, because a second must contain only *two letters*, and *ce♭* contains three letters, viz., *c*, *d*, *e*.

[Let class write major, minor, and augmented seconds to *c*, *d*, *e*, *f*, *g*, *a*, *b*]

How many different kinds of thirds are there ?

Three ; the major third, consisting of four half steps ; the minor third, of three ; and the diminished third, of two.

THIRDS.



There are some reasons, having their foundation in the relation of intervals to their inversions, why it is better to make the diminished third by raising the lower tone of the minor interval, as in the above example, or of the perfect interval, as in fourths, fifths, and octaves.

If we strike the same keys which make a diminished third and call them $c^\sharp d^\sharp$, is the interval still a third ?

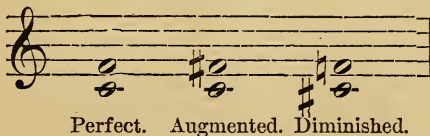
No, because a third must contain *three letters*, and $c^\sharp d^\sharp$ contains only two letters.

[Let class write major, minor, and diminished thirds to *c, d, e, f, g, a, b.*]

How many kinds of fourths are there ?

Three ; the perfect fourth, consisting of five half steps ; the augmented fourth, of six ; and the diminished fourth, of four.

FOURTHS.



If the same keys which make a diminished fourth are struck and called $d^\flat f$, is the interval still a fourth ?

No, because a fourth must contain *four letters*, and $d^b f$ contains only three, viz., *d, e, f*.

If the same keys which make an augmented fourth are struck and called $c g^b$, is the interval still a fourth?

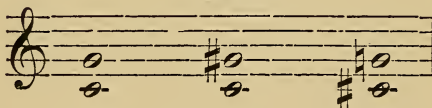
No, because a fourth must contain only *four letters*, and $c g^b$ contains five, viz., *c, d, e, f, g*.

[Let class write perfect, augmented, and diminished fourths to *c, d, e, f, g, a, b*.]

How many kinds of fifths are there?

Three; the perfect fifth, consisting of seven half steps; the augmented fifth, of eight; and the diminished fifth, of six.

FIFTHS.



Perfect. Augmented. Diminished.

If the same keys which make an augmented fifth are struck and called $c a^b$, is the interval still a fifth?

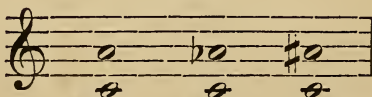
No, because a fifth must contain *only five letters*, and $c a^b$ contains six, viz., *c, d, e, f, g, a*.

[Let class write perfect, augmented, and diminished fifths to *c, d, e, f, g, a, b*.]

How many kinds of sixths are there?

Three; the major sixth, consisting of nine half steps; the minor sixth, of eight; and the augmented sixth, of ten.

SIXTHS.



Major. Minor. Augmented.

If we strike the same keys which make a minor sixth, and call them $c\ g^\sharp$, is the interval still a sixth?

No, because a sixth must contain *six letters*, and $c\ g^\sharp$ contains only five, viz., c, d, e, f, g .

If we strike the same keys which make an augmented sixth and call them $c\ b^\flat$, is the interval still a sixth?

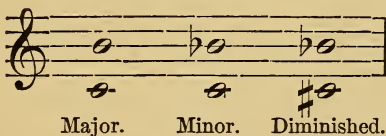
No, because a sixth must contain *only six letters*, and $c\ b^\flat$ contains seven, viz., c, d, e, f, g, a, b .

[Let class write major, minor, and augmented sixths to c, d, e, f, g, a, b .]

How many kinds of sevenths are there?

Three; the major seventh, consisting of eleven half steps; the minor seventh, of ten; and the diminished seventh, of nine.

SEVENTHS.



If we strike the same keys which make a diminished seventh and call them $d^\flat\ a^\sharp$, is the interval still a seventh?

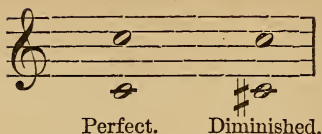
No, because a seventh must contain *seven letters*, and $d^\flat\ a^\sharp$ contains only five, viz., d, e, f, g, a .

[Let class write major, minor, and diminished sevenths to c, d, e, f, g, a, b .]

How many kinds of octaves are there?

Two; the perfect octave, consisting of twelve half steps; and the diminished octave, of eleven.

OCTAVES.



If we strike the same keys which make a diminished octave and call them *d*, *c*, is the interval still an octave?

No, because an octave must contain *eight letters*, and *d* *c* contains only seven, viz., *d, e, f, g, a, b, c*.

[Let class write perfect and diminished octaves to *c, d, e, f, g, a, b*.]

All intervals of the major scale in which the keynote is taken for the lowest tone, are either perfect or major; primes, fourths, fifths, and octaves, are perfect; seconds, thirds, sixths, and sevenths, major.

Minor intervals contain one less half step than the major; augmented intervals, one more than the major, or the perfect; and diminished intervals, one less than the minor, or the perfect.

What is meant by the inversion of an interval?

Placing the upper tone of the interval below the original lower tone.

TABLE OF INVERTED INTERVALS.

Prime.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Octave.
Octave.	Seventh.	Sixth.	Fifth.	Fourth.	Third.	Second.	Prime.

It is here seen that a prime, by inversion, becomes an octave; a second, a seventh; a third, a sixth; a fourth, a fifth; a fifth, a fourth; a sixth, a third; a seventh, a second; an octave, a prime.

The easiest way to find out what an interval will be when inverted is, to add to the interval which we wish to invert that figure which will make it nine; the number added is always the inverted interval; *e.g.*, six added to three make nine; the inversion of a third, therefore, is a sixth; and the inversion of a sixth is a third, &c.

Perfect intervals remain perfect in their inversion, major intervals become minor, minor become major, augmented become diminished, and the diminished become augmented.

The image displays three systems of musical notation, each consisting of a pair of staves (treble and bass clef) showing interval inversions. Above each system are small numbers indicating the interval being inverted.

System 1: Perfect Intervals

- Top staff: Perfect prime (1), Perfect fourth (4), Perfect fifth (5), Perfect octave (8).
- Bottom staff: Perfect octave (8), Perfect fifth (5), Perfect fourth (4), Perfect prime (1).

System 2: Major Intervals

- Top staff: Major second (2), Major third (3), Major sixth (6), Major seventh (7).
- Bottom staff: Minor seventh (7), Minor sixth (6), Minor third (3), Minor second (2).

System 3: Minor Intervals

- Top staff: Minor second (2), Minor third (3), Minor sixth (6), Minor seventh (7).
- Bottom staff: Major second (2), Major third (3), Major sixth (6), Major seventh (7).

Minor second. Minor third. Minor sixth. Minor seventh.

Major seventh. Major sixth. Major third. Major second.

Augmented prime. Augmented second. Augmented fourth. Augmented fifth. Augmented sixth.

Diminished octave. Diminished seventh. Diminished fifth. Diminished fourth. Diminished third.

Diminished third. Diminished fourth. Diminished fifth. Diminished seventh. Diminished octave.

Augmented sixth. Augmented fifth. Augmented fourth. Augmented second. Augmented prime.

Different authors give different names to these intervals; *e. g.*, they are sometimes called large, small, superflous, and diminished; the terms large and small answer to major and minor, and superfluous to augmented.

Every piano student, while young, should become familiar with intervals and their inversion; not only because it is a necessary preliminary to the study of harmony, but because it greatly facilitates the reading of music.

CHAPTER XII.

TRANSPOSITION OF THE SCALE.

We have said that the scale may commence upon any degree of the staff, or upon any sharp or flat, provided the proper order of intervals is retained.

What is this change of pitch called?

The transposition of the scale.

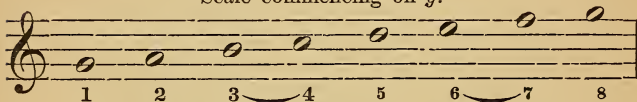
What do we call any tone upon which we commence the scale?

The keynote or tonic of that scale.

What is the rule for the transposition of the scale?

It is found that, if we commence the scale a perfect fifth higher than *c*, viz., on *g*, we are obliged to sharp one letter to bring the half steps in their proper places; if we commence it a perfect fifth higher than *g*, we are obliged to sharp two letters to keep the order, and so on.

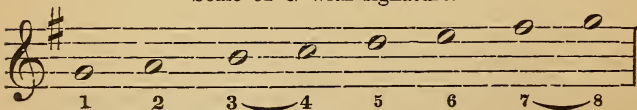
It is also found that, if we commence it a perfect fifth lower than *c*, viz., on *f*, we are obliged to flat one letter to keep the order of intervals, and if we commence it a perfect fifth lower than *f*, two letters, and so on. We, therefore, find it to be a rule, that we commence the scale a perfect fifth higher for every additional sharp, and a perfect fifth lower for every additional flat, beginning to reckon from *c*, which has neither sharp nor flat.

Scale commencing on *g*.

In this scale, the first half step occurs between 3-4, which is right; the second, between 6-7, which should be a whole step. If we sharp *f*, it will not only make the interval between 6-7 a whole step, but it will make a half step between 7-8.

As each sharp and flat is retained after it has once entered the scale, they are all placed at the commencement of the staff, instead of immediately before the notes which they affect, thereby affecting any number of octaves through which the scale may be written, and also rendering the scales easier to read. These sharps or flats standing at the commencement of scales are termed the signature.

Scale of G with signature.



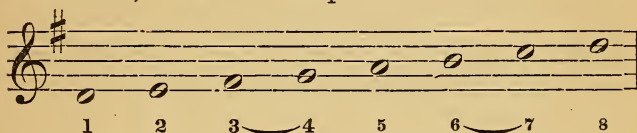
What is the signature of the scale of G?

F# F# is therefore the first sharp, and must be mentioned first in reading a sharp signature.

What is the keynote of two sharps?

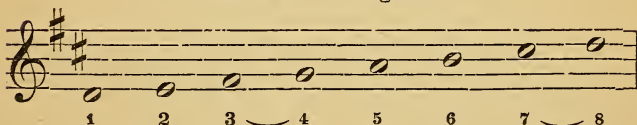
D, because it is a perfect fifth higher than *g*.

Scale commencing on *d*, retaining the sharp which has been found; the second sharp is to be found.



Here again we find the first half step in its right place, and the second one wrong, as in the scale of G before *f* was sharped. If we sharp *c*, the interval between 6-7 will be a whole step, and that between 7-8 a half step.

Scale of D with signature.



What is the signature of the scale of D?

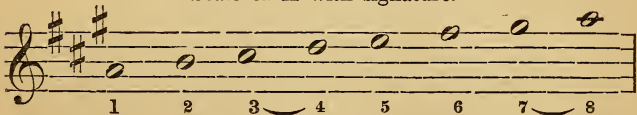
F# and C#. C# is the second sharp.

What is the keynote of three sharps?

A, because it is a perfect fifth higher than *d*.

[Let class find the new sharp in this scale as the first two were found.]

Scale of A with signature.



What is the signature of the scale of A?

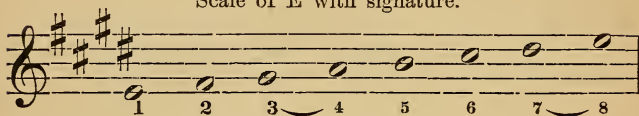
F#, C# and G#. G# is the third sharp.

What is the keynote of four sharps?

E, because it is a perfect fifth higher than *a*.

[Let class find the new sharp in this scale as in the others.]

Scale of E with signature.



What is the signature of the scale of E?

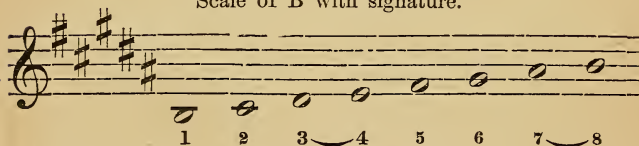
F#, C#, G# and D#. D# is the fourth sharp.

What is the keynote of five sharps?

B, because it is a perfect fifth higher than *e*.

[Let class find the new sharp in this scale.]

Scale of B with signature.



What is the signature of the scale of B?

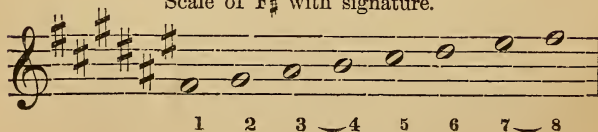
F#, C#, G#, D# and A#. A# is the fifth sharp.

What is the keynote of six sharps?

F#, because it is a perfect fifth higher than *b*.

[Let class find the new sharp in this scale.]

Scale of F# with signature.



What is the signature of the scale of $F\sharp$?

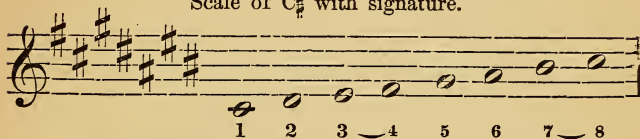
$F\sharp$, $C\sharp$, $G\sharp$, $D\sharp$, $A\sharp$ and $E\sharp$. $E\sharp$ is the sixth sharp.

What is the keynote of seven sharps?

$C\sharp$, because it is a perfect fifth higher than $f\sharp$.

[Let class find the new sharp in this scale.]

Scale of $C\sharp$ with signature.



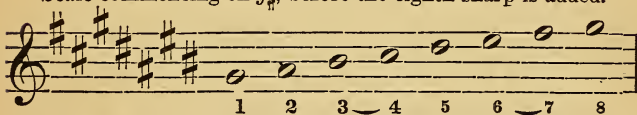
What is the signature of the scale of seven sharps?

$F\sharp$, $C\sharp$, $G\sharp$, $D\sharp$, $A\sharp$, $E\sharp$ and $B\sharp$. $B\sharp$ is the seventh sharp.

What is the keynote of eight sharps?

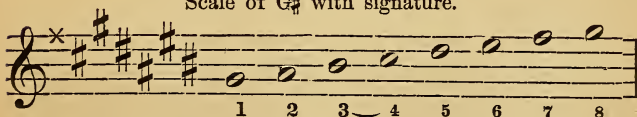
$G\sharp$, because it is a perfect fifth higher than $c\sharp$.

Scale commencing on $g\sharp$, before the eighth sharp is added.



We find in the above scale a half step between 6-7, viz., between $E\sharp$ and $F\sharp$. F , being already once sharp, must be double sharped in order to make this interval a whole step. This will also make a half step between 7-8.

Scale of $G\sharp$ with signature.



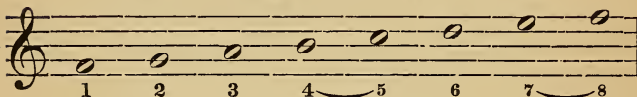
If we transpose the scale again a perfect fifth higher, we shall have $D\sharp$ for the keynote, and $C\sharp$ for the ninth

sharp, and so on, going again through the same round of keynotes, except that each one will be a half step higher, and every sharp will be a double sharp.

What is the keynote of one flat?

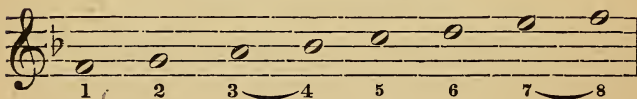
F, because it is a perfect fifth lower than *c*.

Scale commencing on F; the flat to be found.



Here we find a whole step between 3-4; 3 cannot be raised, because that would change interval between 2-3; therefore, 4 must be flatted, and this change makes the interval between 3-4 a half step, and that between 4-5 a whole step.

Scale of F with signature.



What is the signature of the scale of F?

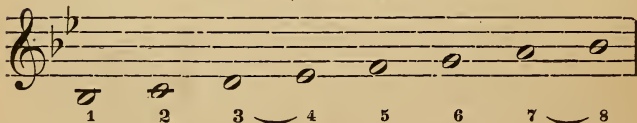
B \flat . B is the first flat.

What is the keynote of two flats?

B \flat , because it is a perfect fifth below *f*.

[Let class find the second flat as the first was found.]

Scale of B \flat with signature.



What is the signature of the scale of $B\flat$?

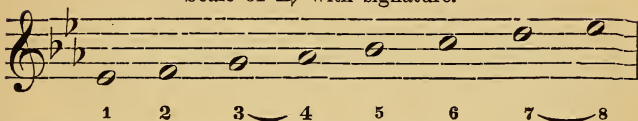
$B\flat$ and $E\flat$. E is the second flat.

What is the keynote of three flats?

$E\flat$, because it is a perfect fifth lower than $b\flat$.

[Let class find the new flat in this scale.]

Scale of $E\flat$ with signature.



What is the signature of the scale of $E\flat$?

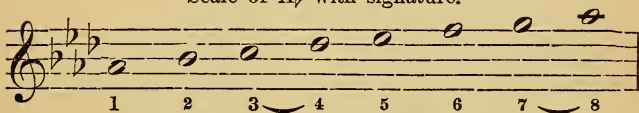
$B\flat$, $E\flat$ and $A\flat$. A is the third flat.

What is the keynote of four flats?

$A\flat$, because it is a perfect fifth lower than $e\flat$.

[Let class find the new flat in this scale.]

Scale of $A\flat$ with signature.



What is the signature of the scale of $A\flat$?

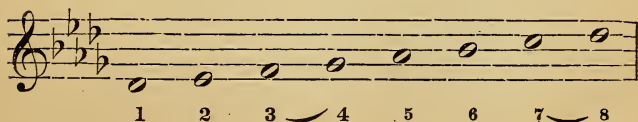
$B\flat$, $E\flat$, $A\flat$ and $D\flat$. D is the fourth flat.

What is the keynote of five flats?

$D\flat$, because it is a perfect fifth lower than $a\flat$.

[Let class find the new flat in this scale.]

Scale of $D\flat$ with signature.



What is the signature of the scale of $D\flat$?

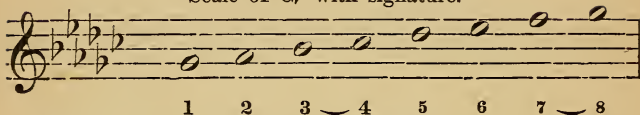
$B\flat$, $E\flat$, $A\flat$, $D\flat$ and $G\flat$. G is the fifth flat.

What is the keynote of six flats?

$G\flat$, because it is a perfect fifth lower than $d\flat$.

[Let class find the new flat in this scale.]

Scale of $G\flat$ with signature.



What is the signature of the scale of $C\flat$?

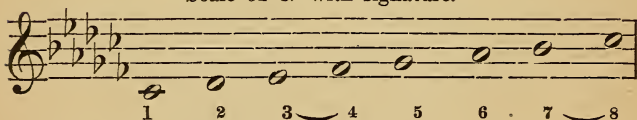
$B\flat$, $E\flat$, $A\flat$, $D\flat$, $G\flat$ and $C\flat$. C is the sixth flat.

What is the keynote of seven flats?

$C\flat$, because it is a perfect fifth lower than $g\flat$.

[Let class find the new flat in this scale.]

Scale of $C\flat$ with signature.



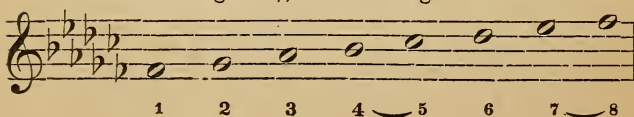
What is the signature of the scale of $C\flat$?

$B\flat$, $E\flat$, $A\flat$, $D\flat$, $G\flat$, $C\flat$ and $F\flat$. F is the seventh flat.

What is the keynote of eight flats?

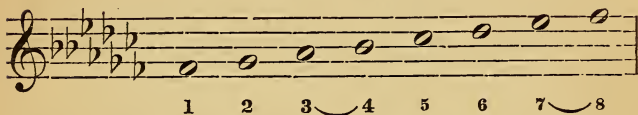
$F\flat$, because it is a perfect fifth lower than $c\flat$.

Scale commencing on $F\flat$, before the eighth flat is added.



Here we find a whole step between 3-4; 3 cannot be raised, because that would change the interval between 2-3; therefore, 4, which is already flat, must be double flatted, and this will make a half step between 3-4, and a whole step between 4-5.

Scale of $F\flat$ with signature.



What is the signature of the scale of $F\flat$?

$B\flat$, $E\flat$, $A\flat$, $D\flat$, $G\flat$, $C\flat$ and $F\flat$. $B\flat$ is the eighth flat.

In this manner, we can transpose this scale farther, but, as we never use more than seven sharps or seven flats, such transposition is useless, except by way of showing *why* it is useless.

The keynote of eight sharps is $g\sharp$; the keynote of four flats is $a\flat$, which gives the scale at precisely the same pitch and is much easier to read. The keynote of eight flats is $f\flat$ —the same as e —which only has a signature of four sharps, and is therefore preferable.

[The teacher should now test the class with the following questions :

What is the keynote of the natural scale? Of seven sharps? Of seven flats? Of six sharps? Of six flats? Of five sharps? Of five flats? Of four sharps? Of four flats? Of three sharps? Of three flats? Of two sharps? Of two flats? Of one sharp? Of one flat?

What is the signature of the scale of C? Of $C\sharp$? Of $C\flat$? Of D? Of $D\flat$? Of E? Of $E\flat$? Of F? Of $F\sharp$? Of G? Of $G\flat$? Of A? Of $A\flat$? Of B? Of $B\flat$?

What is the seventh sharp? The seventh flat? The sixth sharp? The sixth flat? The fifth sharp? The fifth flat? The fourth sharp? The fourth flat? The third sharp? The third flat? The second sharp? The second flat? The first sharp? The first flat?]

Knowing the order of the sharps, what is an easy way to recollect keynotes of the sharp scales?

The keynote of every sharp scale is the next letter above the sharp which is added in the scale; *e. g.*, C \sharp is the sharp added in the scale of two sharps; D, the next letter above C \sharp is the keynote.

Knowing the flats, what is an easy way to recollect the keynotes of the flat scales?

The first flat is the keynote of two flats; the second, of three flats, and so on.

What name do we give to all these scales taken collectively?

Major scales; principally, from the fact that they all have a major third; *e. g.*, the third of the scale of C is E; from C to E is a major third. The third of the scale of D is F \sharp ; from D to F \sharp is a major third, &c.

What is the meaning of the sharps or flats found at the commencement of a piece of music?

They are called the signature, and they show in what scale the piece is written, and, consequently, that all the letters which are sharped or flatted in the signature are to be so altered throughout the piece.

What does an accidental indicate with regard to the scale?

Generally, a temporary modulation into another scale; *e. g.*, if a piece commences in C, and, after a while, we find F \sharp as an accidental, it indicates that the piece is in G as far as the accidental continues. It is impossible at this stage of the pupil's study to give rules by which he can always determine in what key he is playing. The

introduction of any tone which does not belong to the key indicated by the signature is called a modulation, but modulations are oftentimes so complicated that a knowledge of the rules of harmony is necessary to understand them.

CHAPTER XIII.

MINOR SCALE.

Have we any other than the major scale ?

We have one called the minor or small scale. Different forms of this scale have been in use by different nations at different times ; at the present day, we have two, viz., the melodic and the harmonic form.

In how many respects does the minor scale, of whatever form, differ from the major ?

In three ; it commences a minor third below the major scale of the same signature ; it has a minor third ; and its seventh is raised in ascending.

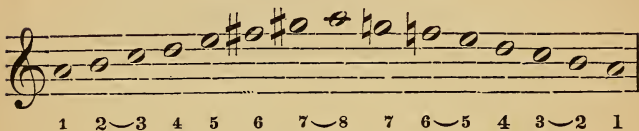
What is the difference between the melodic and the harmonic form ?

The melodic raises the sixth and seventh of the scale in ascending, and in descending replaces them, according to the signature ; the harmonic raises only the seventh of the ascending scale and retains it raised in descending.

What is the keynote of the natural minor scale?

A, because it is a minor third below *c*, which is the keynote of the natural major scale.

Melodic minor scale of A.



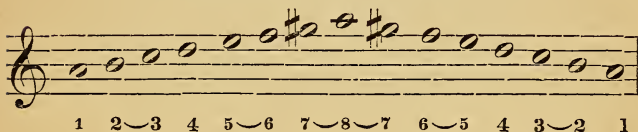
Why are the sixth and seventh raised in ascending and replaced according to the signature in descending?

The seventh is raised because the ear demands a half step between 7 and 8 in ascending *all* scales; it is replaced in descending, because some maintain that the whole step between those tones is not disagreeable in descending. The sixth is raised in ascending, because, after the seventh is raised, the interval between 6 and 7 is an augmented second, and those who use this scale contend that no scale interval should be greater than a step. Replacing the seventh in descending removes the necessity for the raised sixth, which then also is lowered to its natural pitch. The order of intervals, it will be observed, differs from that of the major scale, the half steps occurring between 2-3 and 7-8 in ascending and between 6-5 and 3-2 in descending.

Dr. Weber does not consider this series of tones as a scale in any respect, and he ridicules the idea that an ascending scale can be harmonized differently from the same scale in descending, as this one must be, if harmonized at all; because the chord built upon its dominant E, in ascending, would be E G# B, and in descending, E G B. The F# in ascending and the G# and F# in descend-

ing, he considers transient occurrences, sometimes rendered necessary by peculiar melodic figures, but never essential elements of the scale. The fact, however, that this progression occurs so frequently in running passages, renders it necessary for the pianist to practice it as much as any other scale.

Harmonic minor scale of A.



This scale has a raised seventh ascending and descending; its half steps occur between 2-3, and 5-6, and 7-8; and it has an augmented second between 6-7, which is considered neither incorrect nor disagreeable by those who hold this to be the only real minor scale.

The pupil may observe that all books which give the melodic form in single notes, give the harmonic form when harmonized, i. e., when written in thirds, sixths, tenths, &c.

How is the minor scale transposed?

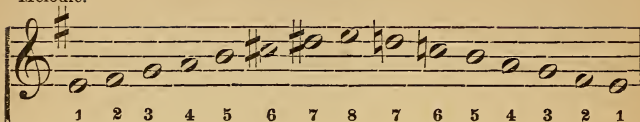
It follows the same law of transposition as the major scale; but the best way to find its keynote for any signature is from the corresponding major scale of the same signature, as it is always a minor third lower.

What is the keynote of the minor scale of one sharp?

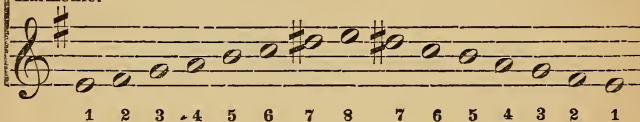
E, because it is a minor third below *g*.

Scale of E minor.

Melodic.

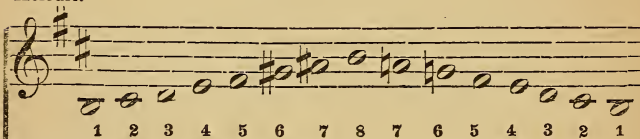


Harmonic.

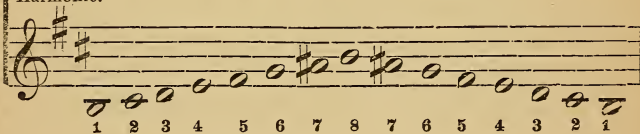


Scale of B minor.

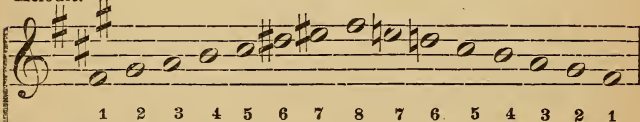
Melodic.



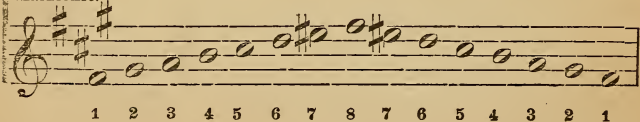
Harmonic.

Scale of F \sharp minor.

Melodic.

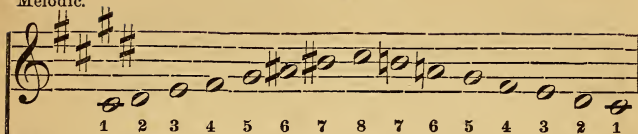


Harmonic.

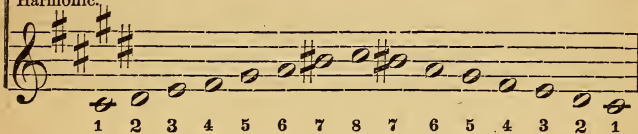


Scale of C \sharp minor.

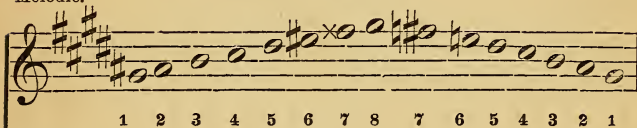
Melodic.



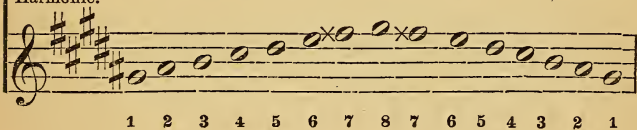
Harmonic.

• Scale of G \sharp minor.

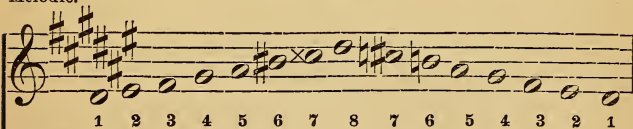
Melodic.



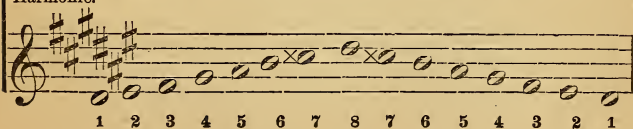
Harmonic.

Scale of D \sharp minor.

Melodic.

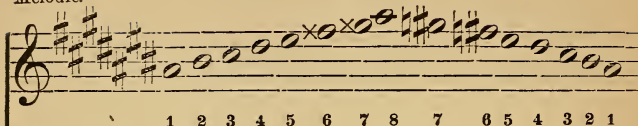


Harmonic.

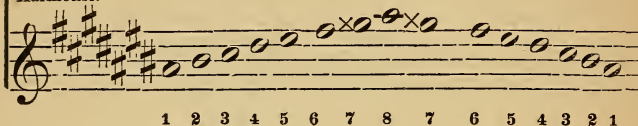


Scale of A \sharp minor.

Melodic.

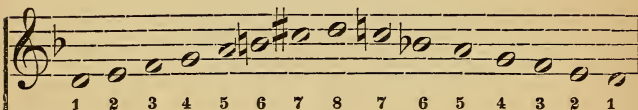


Harmonic.

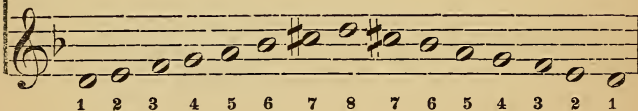


Scale of D minor.

Melodic.

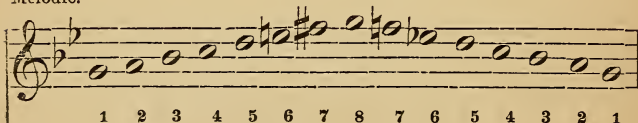


Harmonic.

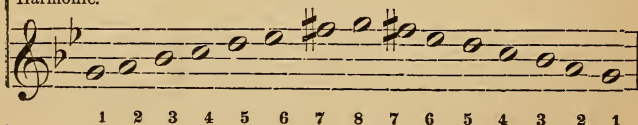


Scale of G minor.

Melodic.



Harmonic.



Melodic.

Scale of C minor.

The image shows the C minor scale in two parts: Melodic and Harmonic. Both are written on a single treble clef staff with a key signature of two flats (Bb and Eb). The notes are: C4, D4, Eb4, F4, G4, Ab4, Bb4, C5, Bb4, Ab4, G4, F4, Eb4, D4, C4. The Melodic version has a natural Bb on the eighth note (C5). The Harmonic version has a natural Bb on the eighth note (Bb4). Below the staff, the fingerings are indicated by numbers 1 through 8, with the descending sequence starting from 7 on the eighth note.

1 2 3 4 5 6 7 8 7 6 5 4 3 2 1

Scale of F minor.

Melodic.

The image shows the F minor scale in two parts: Melodic and Harmonic. Both are written on a single treble clef staff with a key signature of three flats (Bb, Eb, and Ab). The notes are: F4, G4, Ab4, Bb4, C5, Db5, Eb5, F5, Eb5, Db5, C5, Bb4, Ab4, G4, F4. The Melodic version has a natural Bb on the eighth note (C5). The Harmonic version has a natural Bb on the eighth note (Bb4). Below the staff, the fingerings are indicated by numbers 1 through 8, with the descending sequence starting from 7 on the eighth note.

1 2 3 4 5 6 7 8 7 6 5 4 3 2 1

Scale of Bb minor.

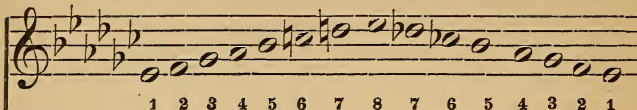
Melodic.

The image shows the Bb minor scale in two parts: Melodic and Harmonic. Both are written on a single treble clef staff with a key signature of three flats (Bb, Eb, and Ab). The notes are: Bb4, C5, Db5, Eb5, F5, G5, Ab5, Bb5, Ab5, G5, F5, Eb5, Db5, C5, Bb4. The Melodic version has a natural Bb on the eighth note (Bb5). The Harmonic version has a natural Bb on the eighth note (Bb5). Below the staff, the fingerings are indicated by numbers 1 through 8, with the descending sequence starting from 7 on the eighth note.

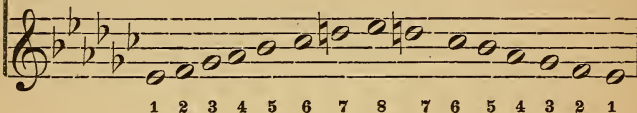
1 2 3 4 5 6 7 8 7 6 5 4 3 2 1

Scale of E \flat minor.

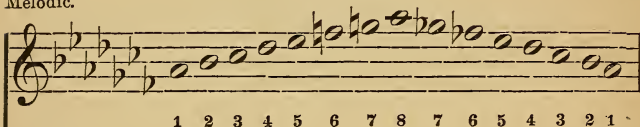
Melodic.



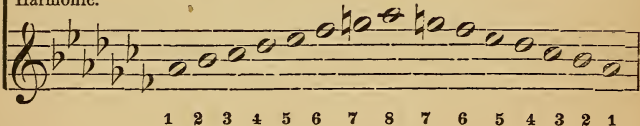
Harmonic.

Scale of A \flat minor.

Melodic.



Harmonic.



Those pupils who are sufficiently interested to pursue farther the study of the minor scales will gain valuable ideas from Weber's Musical Composition, vol. 1, pages 23, and 264 to 269 inclusive. Weber, in this book, declares this scale "a thing artificially made—something that is arbitrary—a structure of human intelligence," and not a principle in nature.

Why is this scale called minor or small?

Because of its minor third.

What name is given the major and minor scales, taken collectively, to distinguish them from any other so called scales?

Diatonic scales.

What does diatonic mean?

It is from two Greek words which signify through the tones.

[Let the class be required to answer the following questions:

What is the keynote of the minor natural scale? Of one sharp? Of one flat? Of two sharps? Of two flats? Of three sharps? Of three flats? Of four sharps? Of four flats? Of five sharps? Of five flats? Of six sharps? Of six flats? Of seven sharps? Of seven flats?

What is the relative minor of A major? Of A \flat major? Of B major? Of B \flat major? Of C major? Of C \sharp major? Of C \flat major? Of D major? Of D \flat major? Of E major? Of E \flat major? Of F major? Of F \sharp major? Of G major? Of G \flat major?

Give the relative major to each of the following minor keynotes: C, C \sharp , D, D \sharp , E, E \flat , F, F \sharp , G, G \sharp , A \sharp , A \flat , B, B \flat .

Give the signature of each of the following minor keynotes: A, E, D, B, G, F \sharp , C, C \sharp , F, G \sharp , B \flat , D \sharp , E \flat , A \sharp , A \flat ?

In what manner can we decide whether a piece is in the major or minor scale of the given signature?

By looking in the piece for the seventh of the minor scale; if it is raised a half step by an accidental, the piece is minor as far as the accidental continues; *e. g.*, the following passage from Beethoven, op. 2, has a signature which indicates either A \flat major or F minor. E is the seventh letter of F minor, and we find it raised by an accidental natural; therefore, the piece is in F minor as far as the E's are made natural.

CHAPTER XIV.

CHROMATIC SCALE.

What is the chromatic scale?

It is a scale consisting of half steps only.

How many kinds of half steps are there?

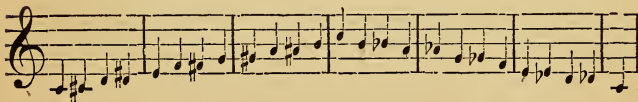
Two; the chromatic, which is between two tones which are upon the same degree of the staff; and the diatonic, which is between two different letters; *e. g.*,

Chromatic half-step.

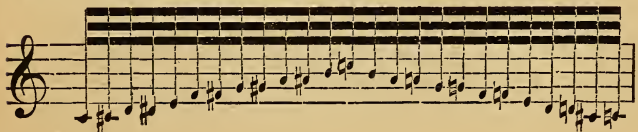
Diatonic half-step.



Chromatic scale with a natural signature.



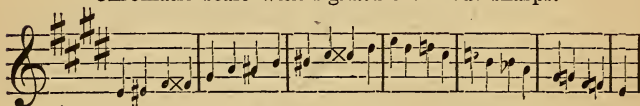
If this were written without bars it would stand as below, because, as the accidentals of the ascending scale are not canceled by bars, they must be used in descending to prevent unnecessary accidentals.



Can we write this scale with any signature?

We can, but in strict accordance with that signature. This is done by always using the signature before it is contradicted, and by never using an accidental when the signature will give the tone wanted; *e. g.*,

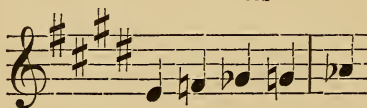
Chromatic scale with signature of four sharps.



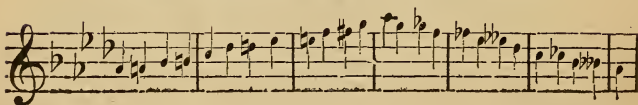
The second note is written e^\sharp , because if it were written f^\flat it would require an accidental natural which would contradict the signature before it was used; the fourth note is written f^\times , because if written g it would require an accidental natural which again would contradict the signature before using it, and with these two unnecessary accidentals the passage would stand thus:



This signature gives the tone f^\sharp ; it would therefore be false to write g^\flat as below.



Chromatic scale with signature of four flats.



The same tone in this scale reads f^{\sharp} in ascending and g^{\flat} in descending, because we ascend by sharps and descend by flats when neither the signature nor any previous accidental gives the tone required. We have e^{\flat} in descending, because if the tone were written d it would require an accidental natural which would contradict the signature before using it.

[The class should write the chromatic scale with all the signatures, as it is the easiest manner of teaching pupils to read accidentals readily, and to use them properly.]

Why is this called chromatic scale?

The word chromatic is from a Greek word, signifying color. It is said that the intermediate sounds were originally represented by notes written in colored ink. Hence the name.

Is this series of half steps, which is called chromatic scale, really a scale in the same sense as the other scales, that is, *the scale of a key*?

It is not, because, if commenced upon any letter, it embraces every sound in the octave, whereas, a scale proper consists only of the essential harmonies of a given key; *e. g.*, the essential harmonies of the *c* scale are the common chords built upon its first, fourth and fifth, viz., *c, e, g,—f, a, c,—g, b, d*, which, taken in alphabetical order, give us *c, d, e, f, g, a, b, c*; and the same is true of any other scale.

CHAPTER XV.

ORNAMENTS.

Webster defines an ornament, "That which embellishes; that which adds grace or beauty." There is no department of music in which we have so few fixed rules as in that of ornaments. Authorities differ on so many points, and there are so many exceptions to the rules, that, were a large volume devoted to the subject, much would still be left to the taste of the player. In a work so limited as this, only a few general rules can be given and a sufficient number of examples to enable the student to play understandingly the simple embellishments he will meet during his first two or three years of study. The only way to obtain good judgment and cultivate a fine taste in ornamentation is, to listen attentively to educated players.

The simplest and most common embellishment is called a grace note, or appoggiatura. It is a small note prefixed to a large one. William Gardiner considers this, like everything else which is effective and pleasing in music, to be derived from "sounds of the animated world." He says, "this grace is derived from nature; we never hear it but when the voice is under the dominion of the passions; as in feelings of joy, supplication, despair, rage, &c. The voice then, by exceeding its usual limits, glances upon this upper tone before it rests upon

the natural one, but when the spirits are languid, as in a state of sorrow, it is but by an effort that we reach the natural tone, first stepping upon the semitone below. It is one of the first tones which children use, for in their ecstasies or imaginary woes, it forms the most prominent feature of their cries. This natural intonation, in the hands of a musician, becomes the most sensible note of his art."

This ornament is of two kinds; the long and the short appoggiatura.

The long appoggiatura is a note of half the length of the principal note, and lies one degree either above or below it. It takes half the time of the principal note, and, therefore, strikes on the strong part of the beat. It is distinguished from the short one by having no dash across the stem; *e. g.*,

(1)

Written.		Played.

(2)

	Written.	Played.

(3)

Written.

Played.



(4)

Written.

Played.



(5)

Written.



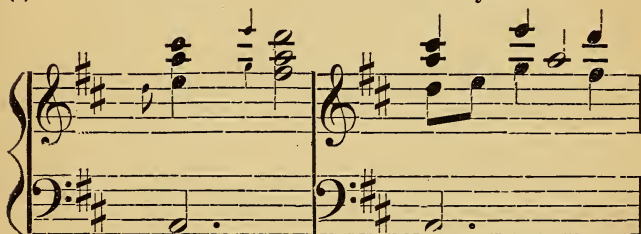
Played.



(6)

Written.

Played.



If this appoggiatura comes before a dotted note, it takes two-thirds of the whole time; *e. g.*,

(7)

Written.

Played.

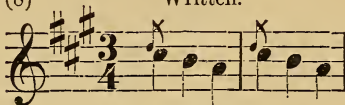


The long appoggiatura is found chiefly in classical music. The short appoggiatura is dashed, and it is played as quickly as possible, taking no time from the note to which it is prefixed. The rule is sometimes given that this note "shall have no time." As it is impossible to play even one note in no time, and, as it cannot take from the time of the note to which it is prefixed, and, as

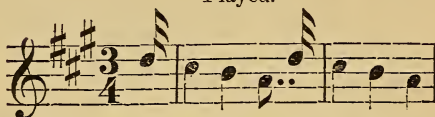
the time of the measures cannot be disturbed by it, therefore, it must take some time from the note or rest before it. Let the time taken for it, however, be as little as possible.

(8)

Written.



Played.



Appoggiaturas are sometimes found in groups of two or more; these are always played, like the single dashed appoggiatura, as quickly as possible, taking no time from the principal or accented note.

(9)

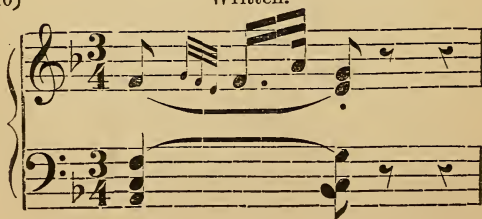
Written.

Played



(10)

Written.



Played.



(11)

Written



Played.

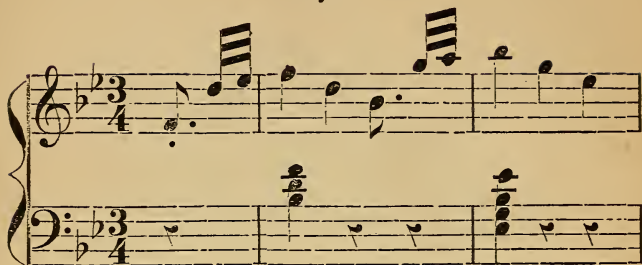


(12)

Written.



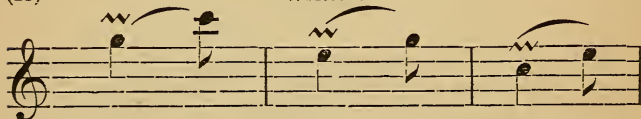
Played.



The Mordent is an ornament indicated by the mark \sim , and it consists of two short tones prefixed to the principal tone. Its effect is similar to that of the double appoggiatura, and it, really, only differs from that in having its accent upon the first of the ornamental tones, instead of upon the principal tone as in the appoggiatura.

(13)

Written.

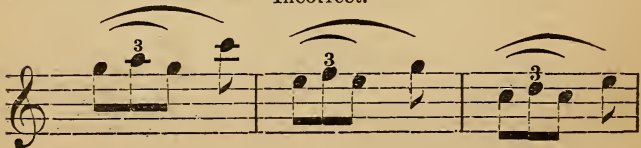


Played.



The mordent is sometimes played as a triplet, thus:

Incorrect.



The following examples show the same passage, as it would be written and played, were the ornament a double appoggiatura instead of a mordent.

(14)

Written.

Played.

The three sounds which compose the mordent must occupy only the time which would be given to the principal tone, if it were not ornamented ; this embellishment, therefore, sometimes requires very rapid execution.

A mordent, occurring upon a note which is to be played with another note of the same hand, obeys the same rule as when upon a single note. In the following example, marked "played," the *b* at 2 must be played with the *g* at 2 ; the *d* at 3 must be played with the *b* at 3, and the three notes of each mordent must be forced into the time of the single note to which it is played, so that the even playing of the four sixteenths shall not be interrupted.

(15)

Written.

Played.

The Turn is an ornament indicated by the mark ∞ , and it consists of three different letters, viz., the one written, which is called the principal tone, the one above, and the one below it. These letters are \sharp , \flat , or \natural , according to the scale of the piece, unless changed by accidentals. An accidental, if above the character, alters the highest letter; if below, the lowest letter.

The rapidity of this embellishment depends upon the time which belongs to the principal note; the order in which the three tones are played depends upon circumstances. If the mark lies exactly over a note which is not dotted, the turn is played as follows: the upper, the principal, the lower, the principal; *e. g.*,

(16)

Written.



Played.



In the above example, the three notes forming the turn are played rapidly, while the principal note is made more prominent by being longer.

In the following example, (Cramer, Book 1, No. 8,) the four notes are to be played evenly—two to each sixteenth of the left hand.

(17)

Written.



Played.



The reason of the above example being played in this manner is, undoubtedly, because the movement is very rapid, and the general effect is smoother than it could be made by an attempt to make the last principal note longer, as in the previous example.

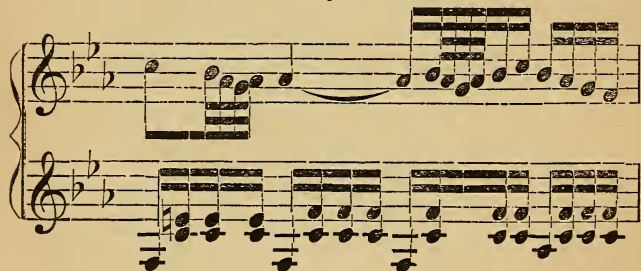
Another similar example.

(18)

Written.



Played.



If the mark is over a dotted note, the note is played first, and the turn afterwards; in such cases the last principal note is played on the time of the dot.

(19)

Written.

Played.



Similar examples.

(20) Written. Played.

(21) Written. Played.

Turn upon a double dotted note.

(22) Written. Played.

In the above example, the last principal note takes the time of the second dot.

When the mark lies after the note, the note is struck first, as if dotted, and the turn made afterwards.

(23)

Written.

Played.



(24)

Written.



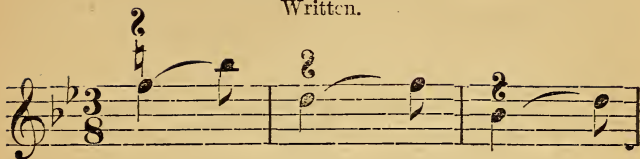
Played.



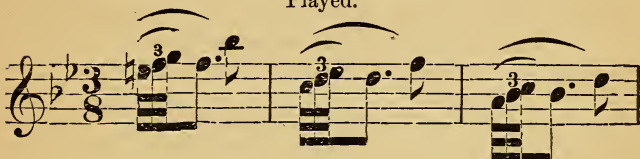
The inverted turn is indicated by the same mark lying in a different position, ♩; it consists of the same sounds as the regular turn, but inverted in the order of playing; *e. g.*, if fig. 16 were an inverted turn, it would be written and played as follows:

Example 16 inverted.

Written.



Played.

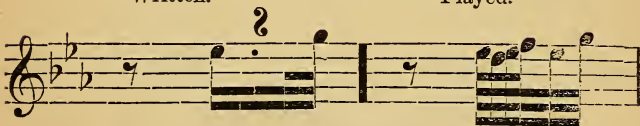


The same rules which apply to the regular turn when placed after a note, or over a dotted note, apply also to the inverted turn.

Example 19 inverted.

Written.

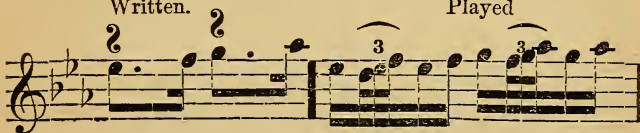
Played.



Example 20 inverted

Written.

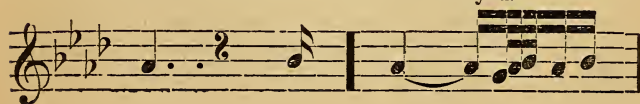
Played



Example 22 inverted.

Written.

Played.



The inverted turn is, at the present day, rarely indicated by a character, but is generally written out in small notes; in such cases, it obeys the laws given for appoggiaturas.

The Trill is the most brilliant and elaborate of all musical embellishments, requiring to be executed always with perfect distinctness, and, oftentimes, with immense rapidity. The student who expects to attain any degree of excellence in this ornament, must practice long and patiently the "slow trill" in five finger exercises.

It is designated by the abbreviation *tr.*, and it consists of a rapid alternation of the note written with the one above it. It consists of as many notes as the player has the ability to execute in the time which belongs to the principal note.

A short trill, if the next note descends, ends with the principal note; *e. g.*,

(25) Written. Played.

The above example being in rapid time will only admit of four trill notes, making, with the principal note, which must close all trills, five notes to be played to the two sixteenths in the bass.

In the following example, there is scarcely time for five notes; it must, therefore, be played as a mordent. There are many cases of this kind, which would be better indicated by the mark \sim .

(26)

Written.

tr *tr* *tr* *tr* *tr*

Played.

A short trill, when the next note ascends, should be played like the conclusion of a long trill, which is simply a turn commencing with the principal note; *e. g.*,

(27) (a)

Written.

Played.

tr

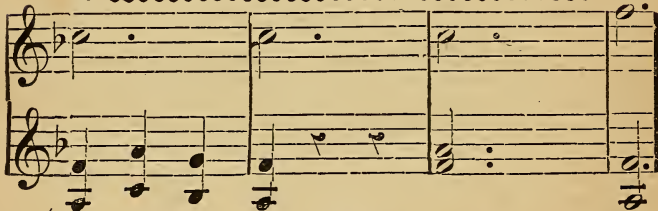
Or, if there is time, two more trill notes can be played before the finishing turn, as at 27, (b).



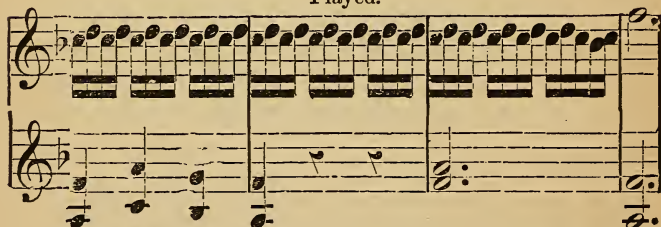
A long trill concludes with a turn, if no other finish is given; *e. g.*,

Written.

(28) *tr* ~~~~~



Played.



The following, from Cramer's Studies, Book 1, No. 11, is an example of a melody accompanied by a trill. The movement being *lento*, the trill should be played in 32d notes, with a clear but delicate touch; and the notes of the melody should be struck distinctly and held with a firm pressure their entire time.

Written.

Handwritten musical notation for measures 1-4. The music is in treble and bass staves with a key signature of three sharps (F#, C#, G#). Measure 1: Treble staff has a whole note G5 with a trill (tr) and a wavy line; Bass staff has a whole note G2 with a fermata. Measure 2: Treble staff has a half note G5 with a wavy line; Bass staff has a half note G2 with a fermata. Measure 3: Treble staff has a half note G5 with a wavy line; Bass staff has a half note G2 with a fermata. Measure 4: Treble staff has a half note G5 with a wavy line; Bass staff has a half note G2 with a fermata.

Played.

Handwritten musical notation for measures 1-4. The music is in treble and bass staves with a key signature of three sharps (F#, C#, G#). Measure 1: Treble staff has a whole note G5; Bass staff has a whole note G2. Measure 2: Treble staff has a half note G5; Bass staff has a half note G2. Measure 3: Treble staff has a half note G5; Bass staff has a half note G2. Measure 4: Treble staff has a half note G5; Bass staff has a half note G2.

Written.

(30)

Played.

In the last measure, the second beat in the bass contains nine notes instead of eight, like the others, because all trills must end with the principal note; and it is not finished with a turn, because the last two notes of the turn would be the same as the first two notes of the $e\sharp$ trill which follows, and,

thereby, make this trill seem to commence on the last part of the second beat. In this example, the melody notes are struck with the trill notes. This is not always the case; in the following example the melody notes take the place of one of the trill notes and are sustained by the pedal instead of the fingers.

(31)

8 va ~~~~~ Written.

8 va ~~~~~ Played.

12/8

ped

*

ped

*

ped

*

ped

*

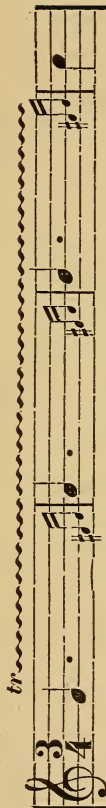
ped

*

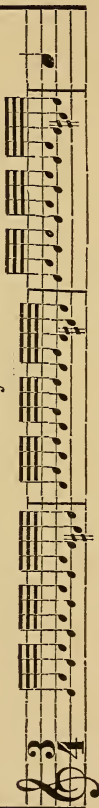
Ascending series of trills.

(32)

Written.



Played.

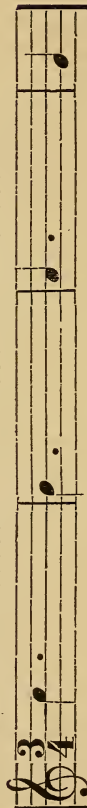


Descending series of trills.

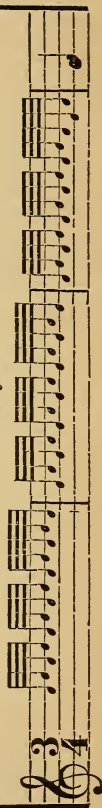
(33)

Written.

tr



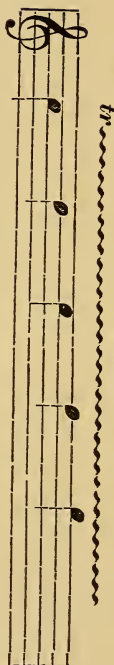
Played.



Ascending series of trills where the time will not admit of as many notes as in example 32.

(34)

Written.



Played.



Ascending series of trills upon notes of different length in a rapid movement.

(35)

Written.



Played.



A trill may be preceded by appoggiaturas, and concluded with a more elaborate finish than a simple turn; *e. g.*,

(36) Written. Played.

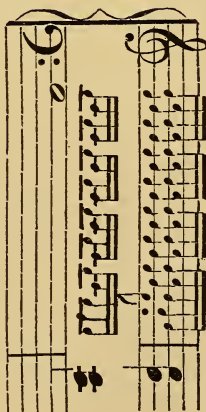
Short trills succeeding each other at irregular intervals, or in regular skips, are generally played without a termination, as the time for their execution is too short; *e. g.*,

(37) Written. Played.

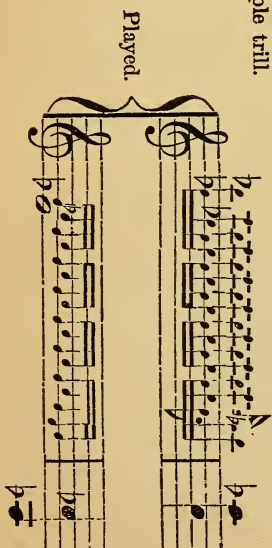
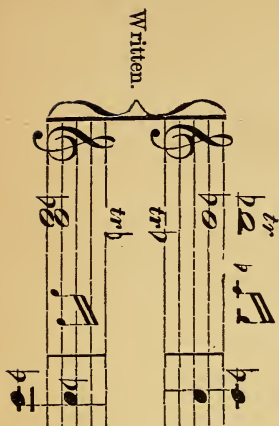
Example of double trill.



Triple trill.



Triple trill.

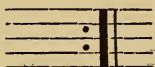


CHAPTER XVI.

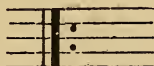
MUSICAL SIGNS AND CHARACTERS NOT MENTIONED IN OTHER CHAPTERS.

What is indicated by dots before or after a bar ?

Dots before a bar thus,



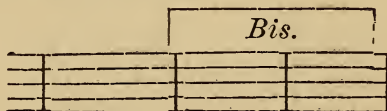
indicate a repetition of the preceding strain ; placed after a bar, thus,



they indicate a repetition of the following strain.

What is the meaning of the word *Bis* ?

Bis means twice, and signifies a repetition of those measures over which it is placed.



What is the meaning of *D. C.* ?




It is an abbreviation of *Da Capo*, and signifies that the player is to return to the beginning of the piece.

After the Da Capo, how is the end of a piece indicated ?

By the words Fine, Finis, Schluss, or a pause over a double bar, made thus,



What is the meaning of D. S. ?

It is an abbreviation of Dal Segno, and signifies that the player is to return to this sign, , or , or , Sometimes the words Dal Segno are not written, but the sign occurs twice ; in this case, when the player reaches the second sign, he is to return to the first and play until the end of the piece is indicated by one of the same signs which indicate the end after Da Capo.

What is the meaning of D. C. al Segno ?

It signifies that the player is to return to the first sign, which, in this case, will be found at or near the beginning.

What is the use of the figures 1, 2, or 1 ma Volta, 2 da Volta placed over one or more measures ?

These figures are abbreviations of Prima Volta and Seconda Volta ; they are accompanied by dots at the double bar and placed under slurs, and signify that, on the repetition of the passage, the player is to omit the measures marked 1 or 1ma Volta, and play the measures marked 2 or 2 da Volta.

What is the meaning of the word Opus, abb. Op. ?

It is used by composers in connection with numbers to designate their works ; *e. g.*, Beethoven, op. 50, signifies that the piece is the fiftieth composition of Beethoven.

What other words are used for the same purpose ?

The French word, *Oeuvre*, and the German word, *Werk*.

What is the use of a curved or waved line placed before a chord?
(See following ex. at 1.)

It signifies that the notes are not to be played quite together, but successively from the lowest upwards, always continuing every sound of the chord until the highest is struck, and they are all heard sounding together. If the reach is so great that the hands cannot sustain them all, as at 2, the pedal must be used to sustain them. If a rolled chord is given for each hand, as at 3, the lowest note in the left hand must be struck with the lowest note in the right hand, and so on to the highest. If a rolled chord is given in both hands, and the waved line before them extends unbroken from the lowest note of the bass to the highest note of the treble, as at 4, the left hand chord is rolled first and then the right hand, both hands sustaining their tones.



What is the use of two stems to one note?

The stem indicating the greater length of note shows how long the note is to be held, and the stem which indicates the shorter length of note shows how long before the next note is struck; *e. g.*,



In this example, the first note has a stem indicating a half note; it is therefore held down through the next three notes. The stem of the same note which turns up indicates that the second note is struck after the first has been held the time of an eighth. In the second measure, the two heads have the same meaning as the two stems in the first measure, except that the long note is held the time of a whole note, instead of a half note. The two heads are necessary, because a whole note cannot have a stem.

When it becomes necessary to indicate which hand is to play a certain passage, how is it done?

By letters or words placed over or under the notes, as follows:

R. H.,	- - - - -	Right Hand.
M. D.,—Mano Destra. (<i>Italian</i>)		“ “
M. D.,—Main Droit. (<i>French</i>)		“ “
L. H.,	- - - - -	Left Hand.
M. S.,—Mano Sinistra. (<i>Italian</i>)		“ “
M. G.,—Main Gauche. (<i>French</i>)		“ “

What is the meaning of *Volti Subito*, abb. V. S.?

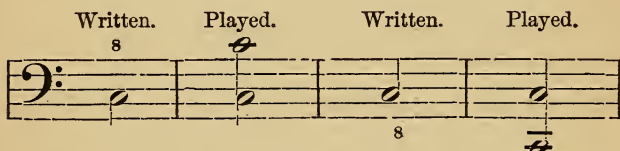
Volti means turn over; *Subito*, quickly. These words are placed at the bottom of a page to indicate that the player must make no break in the time when he turns the leaf.

What is a direct ?

It is made thus, *~*, and is placed at the end of a staff or bottom of a page upon the same line or space upon which the next note is written, that the player may be prepared for it and not break the time. It is found mostly in very old music.

What is the meaning of a figure 8 placed over or under any note ?

When placed under a note, it signifies that the player is to add the note which is an octave below ; when placed over a note, he is to add the note which is an octave above ; *e. g.*,



In what manner are the keynotes of pieces often indicated in music lists and indexes ?

By syllables instead of letters.

Syllables answering to letters of the scale.

C.	D.	E.	F.	G.	A.	B.	C.
Ut. or Do.	Rè.	Mi.	Fa.	Sol.	La.	Si.	Do.

E. g. In the index of a book of Sonates, if we see No. 1, *La majeur*, we understand that the first Sonate is in the key of A major, &c.

What is the meaning of the word *Dur* ?

It means major ; *e. g.*, D. *Dur* signifies D major.

What is the meaning of *Moll* ?

Minor ; *e. g.*, A *Moll* signifies A minor.

What is the meaning of a small *s* affixed to a large letter as the designation of a scale?

It means flat; *e. g.*, *E s dur* signifies E flat major.

What is the meaning of *is* in the same connection?

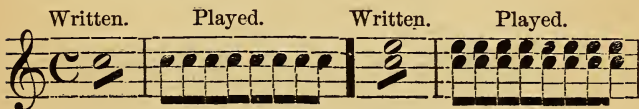
It means sharp; *e. g.*, *C is Moll* signifies C sharp minor.

What is the meaning of *Dièze* in same connection?

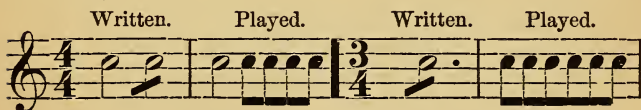
It means sharp; *e. g.*, *Ut dièze mineur* signifies C sharp minor.

When a whole note has a line drawn under it, like the turn on the stem of an eighth note, what does it signify?

It is to be struck as many times as there are eighths in a whole note; *e. g.*,

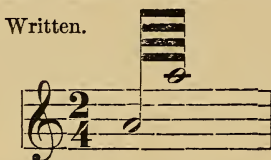
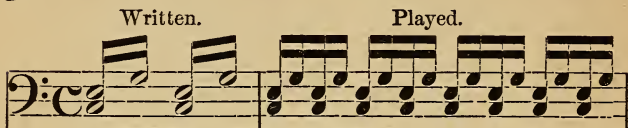


A half note, with one line across the stem, must be repeated as many times as there are eighths in a half note; *e. g.*,



Other abbreviations.

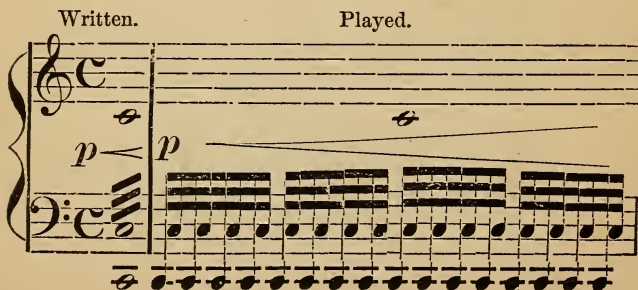




Played.



If the above passage were marked Tremolo, or with its abbreviation, Trem., it should be played simply by making a very rapid alternation of the two notes through the time which would be given to two quarter notes. The same is true of the following passage, except that the tremolo must continue through the time of the whole note:



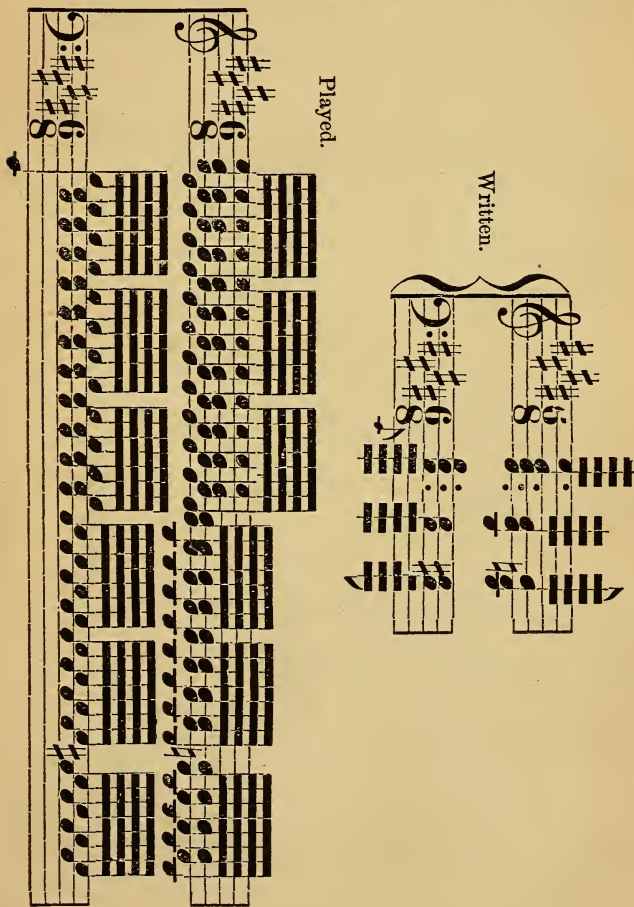
Written.

Played.



Played.

Written.



Written.

8

This musical exercise is written for piano and forte. The treble clef staff contains a series of chords, while the bass clef staff contains a single note, B-flat, which is marked with an '8' below it.

Played.

This musical exercise is written for piano and forte. The treble clef staff contains a series of chords, while the bass clef staff contains a single note, B-flat, which is marked with an '8' below it.

Written.

8

8

This musical exercise is written for piano and forte. The treble clef staff contains a series of chords, while the bass clef staff contains a single note, B-flat, which is marked with an '8' below it.

Played.

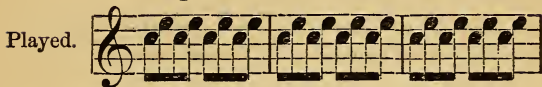
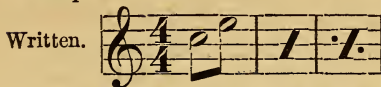
This musical exercise is written for piano and forte. The treble clef staff contains a series of chords, while the bass clef staff contains a single note, B-flat, which is marked with an '8' below it.

Written.

Played.

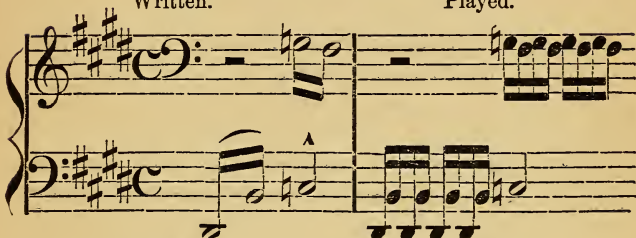
This musical exercise is written for piano and forte. The treble clef staff contains a series of chords, while the bass clef staff contains a single note, B-flat, which is marked with an '8' below it.

Examples of the abbreviation of whole bars.



Written.

Played.



Written.

Played.



How is a passage played which is marked *Glissando*? e. g.,



The finger which is marked is turned over so that the first key is struck on the back of the nail, and then, in the same position, the finger is drawn over the keys till the highest is reached. This must be done strictly in the time allotted to the run. In the above example, the first glissando is to be executed in the time of a quarter note. The second run is a double glissando. The bass of both measures is a rapid tremolo.

There is no invariable rule whereby we can decide whether an abbreviated passage is to be played as a tremolo, or with the regular number of notes indicated by the abbreviation. The teacher must decide for the pupil until the pupil has acquired a general knowledge of music. In music written for orchestra and arranged for piano, like symphonies, overtures, &c., the roll of the drum is generally imitated by rapidly alternated notes; such passages are always played tremolo; but, without having heard the piece, and without access to the score, it is impossible to know positively that a given passage is a drum roll.

CHAPTER XVII.

TRANSPOSITION OF MUSIC.

What is meant by the transposition of music?

Playing or re-writing a piece in one scale which is written in another.

Is it necessary for a pianist to be able to transpose music?

While the pianist is never expected to transpose difficult solos, it is often absolutely necessary to transpose accompaniments to voices and to other instruments; and the player who does not learn to do this will always labor under a great disadvantage.

Some transpositions are easily made, requiring only a change of signature and the alterations of the accidentals. This is when the keynote of the scale into which the transposition is to be made is the same letter as the keynote of the one in which the piece is written, but of a different pitch; *e. g.*, the following passage is in C; to transpose it into C \sharp requires only a change of signature and the alteration of the accidentals.

In C.

From Haydn.





The above transposition gives every note of this passage a half step higher than when it was in C, because, in the scale of C \sharp , every letter is a half step higher than in C natural. Accidentals must sustain the same relation to the scale when transposed, as to the original scale. To sharp F in the scale of C is to raise it from its regular pitch in that scale; to raise it from its regular pitch in the scale of C \sharp requires a double sharp. E, by the accidental flat in C, is lowered from its regular pitch in that scale; to lower it in C \sharp requires a natural. G, in the transposition, requires a double sharp for the same reason that F does. The last G, by the accidental natural in C, is restored to its regular pitch in that scale; to restore it to its regular pitch in C \sharp requires a natural and a sharp.

The same passage transposed a half step lower than it is in C.



In the above transposition, every note, though standing upon the same degree of the staff as in C, is played a half step lower, because in C \flat every letter is flatted. The F which was sharped in C, is made natural in C \flat , to raise it; the E which was flatted in C, is double flatted in C \flat to lower it; G is made natural for the same reason that F is; and the last G is made flat to restore it to its regular pitch in the scale.

What other transpositions can be made in this manner?

Transpositions can be made in case of any scales whose keynotes differ only in pitch but not in letter, viz.: D to D \flat , or D \flat to D; E to E \flat , or E \flat to E; F to F \sharp , or F \sharp to F; G to G \flat , or G \flat to G; A to A \flat , or A \flat to A; B to B \flat , or B \flat to B. Such transpositions can be played at sight by any pupil who is familiar with his scales.

To transpose the same passage from C to A is more difficult. We must first find the interval between the two keynotes, and then transpose every note by that interval. A is a minor third below C; by writing every note three degrees lower, prefixing the signature of three sharps and altering the accidentals, we shall have the passage in A.

In A.



The first D in the bass answers to the first F in C, and, as that F was raised from its regular pitch in C, D must also be raised in A. C, in the second measure of the bass answers to E in C, and, as E was lowered from its regular pitch in C, C must be lowered in A, the only difference being that in C, E was natural and required a flat to lower it, and in A, C is sharp and requires a natural to lower it.

The passage as it stands in A, can be played in A \flat by altering the signature and accidentals, thereby making it a half step lower. But if we wish to play it a half step higher, it becomes more difficult, because, as we do not use the scale of A \sharp , the transposition must be to another letter, viz., B \flat ; and this requires every note to be raised one degree, the signature to be changed to two flats, and the accidentals altered where it is necessary.



The pupil should now be able to make any transposition in this manner; but, if he is not, he should continue this exercise with the aid of a teacher until he is.

Another method of transposition is by the intervals and chords of the scale; *e. g.*, to return to the first passage in C, we find the first chord in the treble to be the

common chord of the keynote ; transposing that to B \flat , it becomes the common chord of that keynote, which is B \flat , D, F, B \flat . The bass of that measure is the keynote, first in an octave, then in single notes ; transposing that to B \flat , it becomes the octave B \flat , then B \flat in single notes. The bass of the second measure in C is the chord of the diminished seventh built upon the F \sharp , showing a modulation into G minor, the dominant minor of C. The dominant minor of B \flat is F, and the chord of its diminished seventh is E, G, B \flat , D \flat , and so on. This manner of transposition requires the ability to recognise, at sight, the intervals and chords of a piece. To learn *how to transpose* is not difficult, but to actually transpose with ease at sight is the result of years of labor ; the pupil should, therefore, commence the practice while young.

CHAPTER XVIII.

MOVEMENTS.


What is the meaning of the word movement ?

Literally, motion ; musically, it has two significations :
 (1.) The manner of motion ; whether in double or triple time, fast or slow, majestic or playful, agitated or calm. The time marks alone do not indicate the movement of a piece ; a passage in $\frac{3}{4}$ time marked *Adagio*, is a very different movement from a passage in $\frac{3}{4}$ time marked *Allegro*.


(2.) The name of a piece or portion of a piece which is to be executed in some particular time and style. Authors frequently give no other name to their pieces than some word which indicates the character of the movement.


What is the meaning of the word *Largo*?


Literally, broad, wide, largely, abundantly. As these words indicate, this movement is characterized by a grandeur and dignity of style. It has been a matter of contention among musical authorities which of the two words, *Largo* or *Adagio*, indicates the slower grade of time. Moore's Mus. En. gives *Largo* the third degree from slow to quick, but musicians almost universally consider it to indicate the first, or slowest movement.

The "Quatuor de I Puritani" is given, *Largo*, $\frac{1}{8}$ time,  = 132.

LARGHETTO, diminutive of *Largo*; very slow, but not quite so slow as *Largo*.

"Adelaide," by Beethoven; *Larghetto*, C time,  = 72.

"Lo, the Star of Eve is glancing," ballad in Opera of *Preciosa*, by Weber, is *Larghetto*, $\frac{6}{8}$ time,  = 80.

"Lacrymosa," from Requiem, by Mozart, *Larghetto*, $\frac{1}{8}$ time,  = 138.

LARGHISSIMO, much slower than *Largo*, (rarely used.)

ADAGIO, sometimes written *Adasio*, abbreviated *Ad°*, literally, leisurely, slowly. This word indicates an exceedingly slow movement, one degree faster than *Largo*. There is a difference of opinion among musicians as to the comparative time of *Adagio* and *Grave*. There is more difference in the character of these movements than in the rapidity. *Grave* implies heaviness, grief and

great gravity in the style, while *Adagio* generally expresses tender and plaintive emotions. An *Adagio* is often highly ornamented.

Beethoven's "Sonate Pathétique," 1st movement, *Int. Grave*, C time, $\text{♩} = 60$.

Beethoven's "Sonate Pathétique," 3d movement, *Ad. Cantabile*, $\frac{2}{4}$ time, $\text{♩} = 60$.

Beethoven's Sonate, op. 27, No. 2, 1st movement, *Adagio*, C time, $\text{♩} = 60$.

Mozart's 3d Symphonie, 1st movement, *Adagio*, C time, $\text{♩} = 60$.

LENTO—Literally, slowly, gently. It indicates a movement a little less slow than *Adagio*. This word is often used comparatively, as *piu Lento*, a little slower.

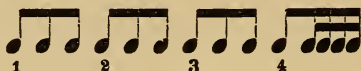
ANDANTE—Literally, going, proceeding quietly along without *ritard.* or *accelerando*; neither slow, like *Adagio*, nor fast, like *Allegro*. Modern writers sometimes say, a slow, distinct movement. It is as impossible to give a definite beat for this movement as for *Adagio* or *Largo*, as it varies according to the style of the piece, always, however, retaining the characteristics of quietness, calmness and steadiness. The proper way to comprehend it fully is to play various Andantes which are metronomized.

Mozart's 3d Symphonie, 3d movement, *Andante*, $\frac{3}{4}$ time, $\text{♩} = 108$.

Beethoven's 5th Symphonie, 2d movement, *Andante con moto*, $\frac{3}{8}$ time, $\text{♩} = 92$.

Beethoven's 6th Symphonie, 2d movement, *Andante molto moto*, $\frac{12}{8}$ time, $\text{♩} = 50$.

It will be seen here that the dotted quarter is given as the beat note. The metronome will therefore beat once for three eighth notes, thus,



Beethoven's 1st Symphonie, 2d movement, *Andante con moto*, ♩ = 120.

Overture to Wm. Tell, 1st movement, *Andante*, $\frac{3}{4}$ time, ♩ = 50.

Overture to Wm. Tell, 3d movement, *Andante*, $\frac{3}{8}$ time, ♩ = 46.

This word is materially changed by the addition of other words; *e. g.*, *Andante maestoso* is slower and more majestic than *Andante Grazioso*.

ANDANTINO—A diminutive; gentle, and not quite so slow and measured as *Andante*.

MODERATO—This word is usually combined with some other word, as *Allegro Moderato*, moderately fast. When standing alone, it indicates a movement in time and character like an *Andante*.

ALLEGRO—This term designates a quick movement. Its character is always cheerful, lively, gay, full of mirth and gladness. To play *Allegros*, the performer must have good technique, a brilliant and flexible touch, and fine accent. Particularly, he must have the knowledge of all scales so firmly fixed in his memory, and have practiced them so much, that the instant he sees a run he knows whether it is a regular scale, and what fingering to apply. *Allegro* is greatly changed in character and movement by additional words: *Allegro Moderato*

is only moderately fast, while *Allegro Furioso* is rapid and vehement. *Allegro Ma Non Troppo* is not nearly so fast as *Allegro di Molto*.

ALLEGRISSIMO is the superlative of *Allegro*.

ALLEGRETTO is the diminutive of *Allegro*, and is less rapid.

Beethoven's "Sonate Pathetique," *All. di Molto*, C time, $\text{♩} = 144$.

Beethoven's "Sonate Pathetique," Rondo, *All.*, C time, $\text{♩} = 104$.

Beethoven's 9th Sonate, 1st movement, C time, $\text{♩} = 152$.

Overture to Zampa, 1st movement, *All. Vivace*, C time, $\text{♩} = 104$.

Overture to Wm. Tell, 2d movement, *All. Vivace*, C time, $\text{♩} = 168$.

Overture to Wm. Tell, last movement, *All.*, $\frac{3}{4}$ time, $\text{♩} = 138$.

"Come, be Gay," Duet in *Der Freischutz*, *Allegretto*, $\frac{6}{8}$ time, $\text{♩} = 108$.

Beethoven's Sonate, op. 27, No. 2, *Allegretto*, $\frac{3}{4}$ time, $\text{♩} = 76$.

PRESTO—Literally, quick, to make haste. This word indicates a very quick movement, much faster than *Allegro*. *Prestissimo* is the superlative of *Presto*, and denotes the highest degree of quickness. The *Allegro*, although fast, has time for much expression of a joyful character, but the *Presto* seems always as if the player were in a hurry.

Beethoven's Sonate, op. 27, No. 2, Finale, *Presto Agitato*, C time, $\text{♩} = 92$.

Beethoven's 5th Sonate, op. 10, No. 1, Finale, *Prestissimo*, C time, $\text{♩} = 108$.

MARCH—This movement differs materially according to the character and purpose of the piece.

Common marches for marching, in C time, or ♩ time, are played with two beats at 104.

Tempo di Marcia, in Concert Stück, by Weber, C time, $\text{♩} = 126$.

Grand Slow March, like Norma, $\frac{4}{4}$ time, $\text{♩} = 50$.

March from Lucrezia Borgia, C time, $\text{♩} = 80$.

Mendelssohn's Wedding March, two beats, 88.

Marcia Religiosa, from Overture to Dinorah, C time, $\text{♩} = 69$.

Beethoven's 12th Sonate, op. 26, Marcia Funebre, C time, $\text{♩} = 60$.


Beethoven's 3d Symphonie, op. 55, Marcia Funebre, $\frac{2}{4}$ time, $\text{♩} = 80$.


The following table of metronomic beats should be committed to memory by every pupil:

GALOP,	-	-	for dancing, one beat,	88.
WALTZ,	-	-	" " "	72.
MAZURKA AND REDOWA,	"	"	"	69.
VARSOVIENNE,	"	"	"	60.
POLONAISE, POLACCA,	"	"	three beats,	93.
POLKA,	"	"	two beats,	108.
SCHOTTISCHE,	"	"	"	80.
QUADRILLES,	"	"	"	120.

TARANTELLE is given, by different authors, one beat, 88 to 100.

MINUETTE is given, by different authors, one beat, 66 to 80.

Beethoven's 4th Symphonie, op. 60, Minuette, $\frac{3}{4}$ time,
 100.

Beethoven's 8th Symphonie, op. 93, Minuette, $\frac{3}{4}$ time,
 126.























This gives three beats in a measure. The same degree
 of rapidity could be expressed by one beat,  42.


Table of the metronomic beats of Cramer's Studies,
 Book 1, taken from a German edition, and given here
 for the benefit of those who have no idea of their rapidity.
 The pupil must remember, while he is practicing to gain
 rapidity in these or any other studies, that, when he
 plays so fast that he strikes wrong notes, or blurs the
 tones by an imperfect touch, he is not only wasting his
 time, but seriously injuring his execution.


CRAMER'S STUDIES, BOOK 1.

No. 1 - -  - 132	No. 11 - -  - 76
" 2 -  - - 100	" 12 -  - - 138
" 3 - -  - 100	" 13 - -  - 132
" 4 -  - - 104	" 14 -  - - 58
" 5 - -  - 132	" 15 - -  - 76
" 6 -  - - 108	" 16 -  - - 132
" 7 - -  - 92	" 17 - -  - 126
" 8 -  - - 84	" 18 -  - - 138
" 9 - -  - 132	" 19 - -  - 88
" 10 -  - - 76	" 20 -  - - 88
No. 21 - -  - - 84.	

After Book 1st has been perfectly learned, the pupil can easily judge of the rapidity of Book 2d, by comparing the different studies with those which are similar to them in Book 1st.

What is a pause?

It is made thus, , and the player must give such a note more than its regular time. No definite rule can be given for the time of a pause. Sometimes it is sufficient to double the time of the note; sometimes it has a finer effect to make it many times longer. The pupil must depend upon the advice of his teacher in such matters, until he has had sufficient study, and heard enough good music, to judge for himself.

What is the use of a pause over a rest? 

The same as when over a note, except that the time passes in silence. The student must never allow himself to pass a pause without obeying it, as, oftentimes, the effect of a prolonged tone, or of an unexpected silence, is greater than any phrase of music which could be performed in the same length of time.

What is the meaning of *ritard.*? abbreviated, *rit.*

To play gradually slower. Players often commit the error of simply changing the time at once into a slower movement. This is not a *ritard.* and has not the same effect. When this is to be done, the word *Lento* is found, or any word which signifies slow, but a *ritard.* makes each successive beat longer than the one before it, until the original movement is resumed at the words, *A Tempo*.

What is the meaning of *accelerando*?

It is abbreviated *accel.*, and signifies that each beat must be shorter than the previous one until the time is resumed at *A Tempo*. There are other words which

change the time of a movement; but for these, recourse must be had to a musical dictionary.

A good timist must not only be able to play a movement with perfect steadiness after he has commenced it, but he must comprehend all the different movements, and be able to start them in the proper degree of rapidity. He must also be able to make a *ritard.*, an *accelerando*, or a *cadenza* of whatever length, and, at the proper moment, resume the original beat.

CHAPTER XIX.

DIFFERENT FORMS OF COMPOSITION.

ACCOMPANIMENT.—Any part, written for one or many voices, or one or many instruments, which is to be subordinate to some principal part for voice or instrument, and is to sustain or support the principal part and heighten the general effect. It requires much study and delicate care to play an accompaniment with purity and distinctness, never overpowering the principal part by an untimely *forzando* or injudicious use of the pedals.

ACCOMPANIMENT AD LIBITUM.—One which is not necessary to the principal part.

ACCOMPANIMENT OBLIGATO—One which is essential to the composition.

AIR, ARIA.—A tune; a short melody.

AIR VARIE.—An air with certain repetitions which are more or less ornamental and elaborated, in which the theme always stands out prominently from the background of trills, *tremolos*, runs, &c.

ALLEMANDE.—A German dance formerly in $\frac{4}{4}$, now in $\frac{2}{4}$ measure, with a slow movement.

ANTHEM.—A composition set to sacred words, sometimes consisting of several movements and adapted to church service.

BALLAD.—A simple story in three or four verses, set to music; sometimes, an instrumental piece composed of a song and accompaniment.

BAGATELLE.—A short, worthless piece.

BARCAROLLE.—A song of the Venetian gondoliers, in 6 or 9 measure, simple, graceful, and sometimes admitting of passionate expression.

BOLERO.—A Spanish dance, in $\frac{3}{4}$ measure, generally accompanied by castanets.

BALLET.—A stage dance.

CANON.—A composition in two or more parts, in which the voices sing the same melody, beginning one after the other, like a fugue, differing, however, from the latter, in that the parts are *strictly* repeated, either in a unison, an octave, or some other interval of the scale.

CANTATA.—A vocal composition consisting of airs and recitations, generally set to the words of a play; it may be called a little opera; sometimes it is more simple, being written for one voice with full instrumental accompaniment.

CANTICLE.—A hymn sung in commemoration of some important sacred event.

CANZONE.—A complicated song of considerable length, in one, two, or three parts,

CANZONETTA.—Diminutive of canzone.

CAPRICCIO, CAPRICE.—A fantasie, in which the composer is not confined by any rule or form of composition.

CAROL.—Originally, a song sung for dancing; at present, a Christmas ballad.

CAVATINA.—An air, generally with a recitative.

CHACONNE.—An Arabian dance in $\frac{3}{4}$ time and slow movement. It has an accent on the first and last beats of the measure.

CHANSON.—A song.

CHANT.—A composition, part air and part recitative, set to the words of the psalms.

CHASSE.—A composition in imitation of hunting music.

CINQUE—PAS.—A dance in $\frac{5}{8}$ time.

CONCERTANTE.—A concerto for two or more parts, either voices or instruments, with instrumental accompaniment.

CONCERTO.—A composition written for some particular instrument with orchestral accompaniment, and consisting of several movements.

CHORUS, CORO.—A piece for many voices.

COUNTRY DANCE, OR CONTRE DANSE.—So called because the parties stand in pairs opposite to each other. Any lively air suitable for dancing may be called a country dance.

COTILLION.—A dance in $\frac{6}{8}$ measure.

DE PROFUNDIS.—A psalm of penitence.

DIRGE.—A mournful piece, played or sung at funeral processions.

DITTY.—A short, simple air.

DUO, DUETT.—A composition for two voices or instruments.

DUETTINO, DUETTO.—A short duet.

ECOSSAISE.—A Scotch air.

ETUDE.—A study; an exercise for the acquirement of rapidity, strength, flexibility, expression, or any other particular point in execution.

FANDANGO.—A Spanish dance with castanet accompaniment.

FANFARE.—A warlike piece, generally imitating the calls of the trumpet.

FANTASIE, FANTASIA.—See CAPRICE.

FUGUE.—Literally, a flight; musically, it is like a canon, except that the parts do not so exactly repeat each other. The fugue is a composition of such vast importance, is so feebly comprehended by ordinary students, and so little is written upon it in books which they can command, that we give the following, from the pen of John S. Dwight, the ablest of all American writers upon the subject of music :

“The Fugue is the vital principle of musical form; it is the prime secret of all form, the very soul of it. Whatever music does not more or less imply the fugue principle, though it need not be strict fugue, is likely to be poor and shallow music. For fugue is but the logical development of what is latent in a germ or theme. It is in music what the spiral law of growth is in the plant. It has its prototypes in nature; in the surf billows rolling up the beach; in the waves that run along a field of grain before the wind; in the widening vortex of the whirlpool and the waterspout; in the tongues of flame losing themselves and reappearing as the fire soars and seeks the sky. It has its correspondencies in other arts; in nothing, perhaps, so strikingly as in those wonderful creations of religious architecture, which are the furthest

removed from mere mechanics and geometry, which speak so to the soul and the imagination, and almost seem alive and growing, as it were yearning, reaching, soaring upward while we look at them—the old Gothic churches. There we *see* the fugue in solid form; that is what Madame De Staël meant when she called architecture ‘frozen music;’ there we find the same precision of minute detail, the same endless echoing and imitation of motives and parts of motives, phrases, with quaint particulars; a thousand pointed arches, clustered columns, cunning tracery, and, peeping out of unexpected corners, exquisite or grotesque shapes of plants, of men, of animals, and monsters, as if to include all the images that ever filled the waking thoughts or dreams of man in history—all aspiring, growing to a climax, yet to the mind still hinting further growth, still seeming in the process of *becoming*, never absolutely *done*; utmost finish in detail mechanically, actually, but ideally suggesting still the Infinite, the unattainable in time. This suggestion of the Infinite is what we would call the *expression* of the fugue. (Only, to be expressive, it must be a fugue of genius.) Yes, in music, the fugue is the perfect type of unity in variety. It is nature’s own law; the true instinct of genius felt it out, obeyed it unconsciously by the inmost necessity of art and of its own soul.

To be bound always strictly to the fugue form is pedantry; but not to know it, not to feel it, not to imply it even in free composition, is to forsake the real fount of inspiration. All the great composers, the real creators whose works live forever,—Beethoven, for instance, who did not very often write fugues *as such*,—working, by a true instinct, with nature and the divine laws of essential form, or unity, still imply the fugue in whatever form they write; they have its secret in them, its law is in their hearts, the soul of all their method; indeed, so familiar are they with it, that they need not literally present it. It lay at the basis of their culture. No one is fairly master of the free forms, until he is master of the fugue. That is, wherever there is harmony, wherever there is more than one *part*, true art dictates that the parts move individually, that there be sure contrapuntal texture. Where Counterpoint sits down to work, Fugue looks over its shoulders.

And now we see why one never exhausts the interest of a good fugue. There has been plenty of mechanical, dry fugues, results

of plodding calculation, ingenious, learned, but without much expression. But there are also live ones; a live one never gets hackneyed, never dogs and persecutes the mind like tunes in fashion, which the street organs keep forever murdering, but will not bury. Mere melody has in it a principle of decay; it stales by repetition; and therefore the music that proclaims the Infinite, the great religious music from of old, has worn the undecaying form of fugue and counterpoint. * * It can no more bore you now than can the themes, the motives, multiplied, repeated, echoed, imitated, or contrasted, throughout the whole upward floating, spirit-like, scarcely material mass of a Strasbourg or Cologne cathedral. * * Right healthy music are the fugues of Bach, and hearty too. To him the fugue form had become a native, pliant, and obedient language, in which he could express himself most readily. * * Handel, too, was grand in fugue, but far less various than Bach."

In addition to the above, we give the following intelligent advice to a pupil, by Mr. Henry Carter:

"HOW TO LISTEN TO A FUGUE."

"If you wish to understand a Fugue, listen closely to the first twenty notes or so. They are given out distinctly, one at a time, and will be constantly repeated throughout the piece. After the first twenty notes, a duet commences, in which the upper or lower part must repeat the melody already given. After the duet, comes a trio, with the same first melody in the highest or lowest set of notes. When the trio is finished, a quartette begins, and then, as before, you will find the first melody or subject uppermost or in the lowest part. From this point, the fight thickens, and the melody, in contending with the other parts, is often broken into fragments. An attentive ear, however, will discover that the mutilated melody is constantly struggling to make itself important, and that it will always succeed in asserting its claim to prominence in some part of the turmoil. Before the close of the composition, when point and counterpoint, fugue and double fugue, fugue in the fifth and fugue in the octave, have all contended for the mastery, be sure you will see confusion conquered, and your old friend, the first subject, triumphantly vaunting himself the

unmolested conqueror. The reason people hate fugues is, that they expect the melody always in the upper part, and seldom find it. Hunting for the melody, when obscured by three inferior melodies or accompaniments, is a source of keen enjoyment to an educated musical mind. A musician, once in the habit of unraveling and dissecting intricate figures, looks upon compositions where all the beauty is on the surface, much as a chess-player looks upon cards. In Bach's figures, do not look for contrasts of light and shade, for quiet, sentimental effects, for dramatic power. They have a character of their own, a healthy vigor of manliness, as well as being full to the core of intellectual strength. They may be compared more fitly to huge, sublime rocks than to sweet violets and the charming forget-me-nots."

FUGHETTA.—A short fugue.

GALOP, OR GALOPPE.—A quick dance movement in $\frac{2}{4}$ time, of Russian origin.

GAVOT, GAVOTTA.—A lively dance in $\frac{2}{4}$ time.

GLEE.—From a Saxon word signifying music. The term glee has, at different times, been applied to many different forms of vocal composition. The old minstrels were, at one period, called gleemen, and their songs, glees. Duets have been called glees; but, at the present day, the word is applied to a composition in three or more parts, sometimes consisting of more than one movement, and its character may be gleeful or pathetic.

HORNPIPE.—A lively movement which took its name from the instrument which was formerly played for the performance of the dance.

INTERLUDE.—A short, musical sentence, played by the organist between the verses of a hymn; any song or dance introduced between the acts of a play; a short piece played between the verses of any song, or, as a connecting link, between the main parts of any extended composition.

IMPROMPTU.—Something improvised, of no regular form.

IDYLLE.—A short composition, of no particular form, but expressive of some delicate thought or sentiment.

JIG.—A quick dance movement, generally in $\frac{6}{8}$ measure.

LIED.—A song.

LAUDAMUS.—A song of praise. Part of the mass.

MADRIGAL, MADRIGALE.—An elaborate vocal composition, in several parts, requiring extended musical knowledge in the composer, and careful study by the performer. Its origin is ancient; its nationality, generally supposed to be Spanish; the burden of its words, generally, love.

MAGNIFICAT.—A part of the vesper service of the Catholic church.

MARCH, MARCIA, MARCHE.—A composition in common time, whose movement depends upon the purpose for which it is written. (See metronomic beats for marches in chapter on movements.)

MASS, MISSA, MESSE.—The musical service of the Catholic church; usually in five movements. 1st, The Kyrie, an invocation; 2d, The Gloria, a hymn of praise; 3d, The Credo, confession of faith; 4th, The Sanctus, a hymn preceding the consecration of the host; 5th, Agnus Dei, a prayer, generally sung before communion and after mass, characterized by depth and tenderness of melody.

NOCTURNE, NOTTURNO.—A composition, calculated for night music, from its serious, soft character.

MAZURKA, MAZOURKA, MAZOURKE.—A Polish dance in $\frac{3}{4}$ time, with a peculiar accent, and capable of expressing much and varied sentiment. The Mazurkas of Chopin are the most celebrated.

MEDLEY.—A mixture of parts or passages of familiar airs, so arranged that the last notes of one pass smoothly into the first notes of the next.

MINUET, MENUET, MINUETTO.—A slow, measured dance, in $\frac{3}{4}$ time.

NOËL.—A Christmas song of joy.

OCTUOR.—A piece for eight voices or instruments.

ODE.—An air or song.

OPERA, OPUS, OEUVRE.—Literally, a work. If we find on the title page of a piece op. 1, it signifies that the piece is the first composition of the author. If op. 2, it is his second composition. Also, a drama set to music, consisting of airs and choruses, recitatives, with accompaniment of orchestra, and requiring elegant scenery and all the stage machinery and decorations of the theatre for its production.

OPERA BUFFA, or BOUFFE, or BOUFFO.—Comic opera.

OPERA SEMI-SERIA.—An opera half serious.

OPERA SERIA.—A tragedy set to music

OPERETTA.—A little opera.

ORATORIO.—From the Latin word, *orare*, to pray. It is a musical drama, the subject of which is taken from sacred history. The finest music in the world has been written for oratorios.

OVERTURE, OUVERTURE, OVERTURA.—An introduction to an opera, oratorio, &c. It generally consists of several different movements, and, in most cases, gives the audi-

ence an idea of the composition which is to follow, by introducing snatches of its principle melodies.

PASTORAL.—A musical drama, the subject of which is taken from rural life. The music is characterized by sweetness and simplicity.

PASTORALE.—A quiet, gentle movement, without ornament; often written in $\frac{6}{8}$ measure.

POLACCA, POLONAISE.—A Polish national dance in $\frac{3}{4}$ measure, characterized by its accent falling often on the second part of the measure. Like the mazurka, it is capable of much and varied expression.

PRELUDE.—A short piece, or musical sentence, played to introduce and prepare the mind for a longer one.

POLKA.—A popular dance in $\frac{2}{4}$ time.

QUADRILLE.—A set of five dance movements, called "La Pantalon," "La Poule," "La Trenise," or "La Pastourelle," and "La Finale."

QUARTETTO, QUARTET, QUATUOR.—A composition for four voices or instruments.

QUINTETTO, QUINTET, QUINTUOR.—A composition for five voices or instruments.

RANS DES VACHES.—Swiss airs, played by the herdsmen upon the bagpipe or alpine horn, while watching their flocks on the mountains. These are the airs which the bands were forbidden to play to the Swiss soldiers during the French wars, as those who heard them often deserted or died of homesickness.

RECITATIVE.—A musical declamation, written in $\frac{4}{4}$ measure, and performed by the singer in fast or slow time, nervously and impassioned or calmly and sadly, according to the passions expressed by the words. The

recitative in the opera is short, consisting of only a few sentences, and it is generally the introduction to an air.

REDOWA.—A Bohemian dance in triple measure, performed in the same time as the mazurka.

REQUIEM.—A funeral service composed and performed for the repose of the dead.

REEL.—A Scotch dance in $\frac{4}{4}$ or $\frac{6}{8}$ time.

RHAPSODIE.—A caprice.

RONDO.—A composition, vocal or instrumental, in which the melody at the end of every strain returns to the first strain, with which it finally ends. The melody *goes round*, hence the name.

SALTARELLO.—A peculiar kind of movement in $\frac{6}{8}$ time; so named from the jumping, leaping motions of the dance.

SYMPHONY, SINFONIE.—An extended composition in several movements, written for the orchestra. John S. Dwight calls it the “architectural *massing* of several movements in a great symmetrical musical whole.”

We append the following, from the same author, for the benefit of those who wish to read something learned and philosophical upon this form of composition :

“This form, we say, is not mere accident or imitation of one man’s success beyond its reasonable term of life. The reason of it is to be sought in the nature of the human soul and in the corresponding nature of music.

How is it with us when a matter interests us and excites us to that pitch of feeling in which music steps in as the natural language? Our whole nature is engaged in it. The head, or thinking principle; the heart, or feeling, loving principle; the will, or active principle; and more or less (amid these earnest powers) the lively, recreative play of fancy,—all take part in it, all in turn are principally addressed by it. Reason, passion, frolic humor, will :

these seek each its type and representative in the forms of an art so perfectly human and so pliant to the motions of the human soul as music. If a matter taxes our reasoning, truth-seeking faculties for one spell, it is a law of our nature that we then quit thinking and only *feel* about it for another spell. We modulate out of the dialectic into the religious and accepting mood. It *was* an argument, an emulous labor of the brain; it has become a lyric of the heart, a prayer, a hymn, a softly rising incense and aroma of the faith and love and longing in us. And then, the more we have been in earnest, the more naturally comes the reaction of frolic fantasy and humor, the more lively the suggestions and "heat-lightnings" of a quick, surcharged, midsummer fancy,—the *scherzo* humors that so often flash from characters of deepest pathos. But the circle of moods is not yet complete. Thought, feeling, fancy, are but phases of the living stream that yet must ultimate itself in action, must rush into *deed*, and so pour its life into the great ocean whence all proceed and to which all tend. That is the *finale*. Now for the musical correspondence.

The first, or allegro movement of a symphony, takes up a theme, or themes, and proceeds to their discussion and elaboration. It begins with a principal *theme* or subject; presently, with the natural modulation into the dominant or relative key, comes in a *counter theme*; these two are developed and contrasted a little way, when the whole passage is literally repeated to fix them firmly in the mind. Then begins a sort of analytic canvassing of all that they contain; fragments, phrases of the one are blended with or off-set against the other; the two propositions (often waking up a number of accessory subjects by the way) are subjected to a sort of exhaustive musical logic, till what is in them is brought fully out and verified. By a sort of refining, differentiating, intellectual argumentation, these themes are held up in various lights, are developed singly and in contrast, and are worked through various keys, abridgements, augmentations, episodes, digressions, into a most various and complex whole, in which the same original thread or themes continually reappear, yet with perpetual sense of novelty. The intellectual principle delights in analysis, in the detection of differences and distinctions. So the symphonic allegro betrays a tendency to continual divergence and escape from the first starting point. Here is an art type of *dis-*

cussion, whose whole aim and tendency is unity and truth. What a type of catholicity in thought! Discussion, no denial; music is incapable of that; Mephistopheles in music must make sad work, or forget his nature.

Then comes the *adagio*, *larghetto*, *andante*—some slow movement, which has more of calm, still feeling and unquestioning religion in it. This is the central sanctuary in this musical abridgement of man's life, which every good symphony appears to be. This is the heart; that the head.

The serious *andante* passes—sometimes directly, sometimes through the frolic *scherzo*, and the *minuet* and *trio*—into the *rondo finale*, which is rapid and full of the spirit and preparation for action, full of resolve and fire. The sentiment which has passed through the crucible of the judgment in the *allegro*, and sought its divine repose at the religious altar of feeling in the *adagio*, having traversed its intellectual and its effective phases, now puts on its armor and moves on with alacrity for action. (Though, in many lighter symphonies, it is more like a school-boy pulling on his hat and rushing out of doors in pure animal spirits.) It seems to act itself out with buoyant confidence; sometimes with sublime triumph, as in the march concluding the C minor Symphony."

SONATE.—The same form of composition as the symphony, adapted to one instrument.

SONATINA.—A little sonate.

STRATHSPEY.—A lively Scotch dance in $\frac{4}{4}$ time.

SESTETTO, SESTUOR.—A composition for six voices or instruments.

SEPTETTO, SEPTET, SEPTUOR.—A composition for seven voices or instruments.

SCHOTTISCH.—A dance similar to the Polka, but performed in a little slower time.

TARANTELLA, TARANTULA DANCE.—A swift Italian dance in $\frac{6}{8}$ measure, so named from an old fancy, that it had power to cure the poisonous bite of the spider called Tarantula.

TOCCATA.—Similar to a capriccio.

TRIO, TERZETTO, TERZETT.—A composition for three voices or instruments.

VALE.—A waltz.

VARIATIONS.—See AIR VARIE.

VESPER HYMN.—A hymn sung during the evening service of the Catholic church.

VAUDEVILLE, VIRELEY.—A street song, taking its name from the town Vaudevire, where it was first composed. A small play, a farce given after an opera.

WALTZ.—A modern dance in triple measure, of a moderately slow and graceful movement.

CHAPTER XX.

RULES FOR FINGERING CHORDS AND ARPEGGIOS.

Children may be taught to finger correctly, before they are old enough to comprehend the science of music; therefore the author has endeavored, by using no technical names of chords, to render these rules so simple that they may be learned (with the aid of a teacher) by any child who can finger the first few scales. The pupil should commence the practice of arpeggios and scales at the same time, and both should be taught and practiced without notes. As this is not intended for an "Instruction Book," we would refer the student to, "Method for the Piano-Forte," by William Mason and E. S. Hoadley, as containing many useful and practical hints for arpeggio practice.

Those who are not familiar with the names of chords, must study this entire chapter; others need only learn the "Rules and Exceptions" given in fine print at its close.

First, *Arpeggios of three letters commencing upon a white key.*

When the reach is an octave, the third finger plays the next letter to the fourth finger, as in example 5 (*b*) second group of notes in the treble, and in example 7; or it plays the third *letter* from the fourth finger, (counting the letter played by the fourth finger as one,) as in the bass of example 1, the bass of example 8, and the treble of example 9.

The second finger generally plays the fourth letter from the fourth finger, as in the treble of example 1, and the bass of example 3. When it is necessary to use this finger on any other letter, the necessity will be obvious to the pupil at a glance, as in example 6 (*a*) first measure, and in example 7.

Ex. 1.



If this chord is broken as in the following example, the fingering is determined by placing the hand over an octave at each change of position, and obeying the rule for the use of the second and third fingers.

Ex. 2.

Exercise 2 is a short piece for piano and forte. It consists of two staves. The treble staff begins with a triplet of eighth notes (F4, G4, A4) marked with an 'X', followed by a series of eighth and sixteenth notes. The bass staff starts with a triplet of eighth notes (C3, D3, E3) marked with an 'X', followed by a series of eighth and sixteenth notes. The piece concludes with a final triplet of eighth notes in the treble staff (F4, G4, A4) marked with an 'X'.

Ex. 3.

Exercise 3 is a short piece for piano and forte. It consists of two staves. The treble staff begins with a triplet of eighth notes (F4, G4, A4) marked with an 'X', followed by a series of eighth and sixteenth notes. The bass staff starts with a triplet of eighth notes (C3, D3, E3) marked with an 'X', followed by a series of eighth and sixteenth notes. The piece concludes with a final triplet of eighth notes in the treble staff (F4, G4, A4) marked with an 'X'.

Ex. 4.

Exercise 4 is a short piece for piano and forte. It consists of two staves. The treble staff begins with a triplet of eighth notes (F4, G4, A4) marked with an 'X', followed by a series of eighth and sixteenth notes. The bass staff starts with a triplet of eighth notes (C3, D3, E3) marked with an 'X', followed by a series of eighth and sixteenth notes. The piece concludes with a final triplet of eighth notes in the treble staff (F4, G4, A4) marked with an 'X'.

Ex. 5. (a)

Treble staff: \times 1 2 \times 1 2 \times 1 2 \times 1 2

Bass staff: 4 3 1 \times 3 1 \times 3 1

The same chord separated differently.

Ex. 5.(b)

Treble staff: \times 1 2 4 \times 1 3 4 \times 2 3 4 \times 1 2 4

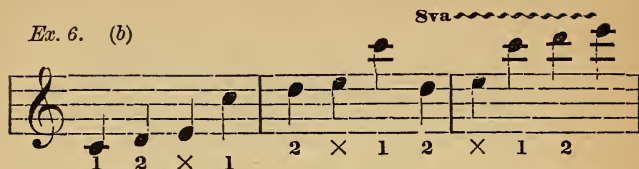
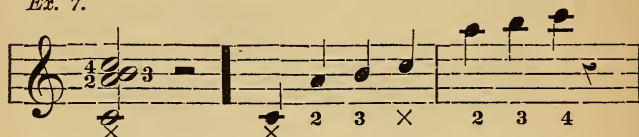
Bass staff: 4 3 1 \times 4 3 1 \times 4 2 1 \times 4 3 1 \times

Ex. 6. (a)

Treble staff: 4 4 | 1 2 4

Bass staff: \times 1 \times \times \times 1 2 \times 1 2 4

In the above example the letters, if struck together, would be fingered as given, but if played as an arpeggio, would be fingered as follows.

Ex. 6. (b)*Ex. 7.*

Example of an arpeggio commencing upon a white key and containing a black key.

Ex. 8.*Ex. 9.*

The arpeggios of the following scales are fingered like those given—G maj., E min., B min., A maj., E maj., B maj., F maj., D min., G min., C min., F min.

Secondly, *Arpeggios of three letters commencing upon a black key, and containing only one white key.*

The fingering of such arpeggios is determined by placing the thumb on the white key, stretching the hand out over an octave, and obeying the first rule, viz., the rule for the use of the second and third fingers; *e. g.*,

Ex. 10.



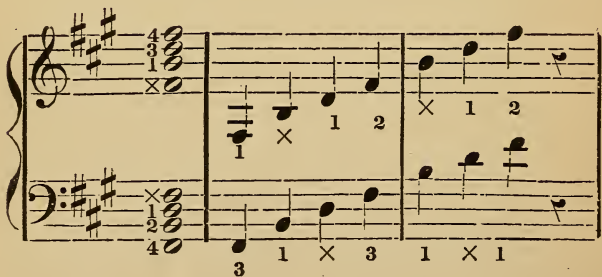
In the above arpeggio, the white key is B. To determine the fingering of the right hand, place the right thumb upon this letter, and the little finger upon the next B above. According to the rule, the first finger plays D#, and the second finger, F#.

In the left hand, place the thumb on B, and the little finger on the next B below. The third finger will then play D#, and the first, F#. The following is another example of the same kind:

Ex. 11.

Thirdly, *Arpeggios of three letters, commencing upon a black key, and containing two white keys.*

The fingering of such arpeggios is determined by two facts, viz., that it is easier to put the thumb under after a black key than after a white one; and it is easier to put a finger over upon a black key than upon a white one. Therefore, in such arpeggios, the right thumb will play the first white key, and the left thumb, the second; *e. g.*,

Ex. 12.

The following is another example of the same kind of arpeggio:

Ex. 13.



Fourthly, *Arpeggios of three letters, all of which are black keys.*

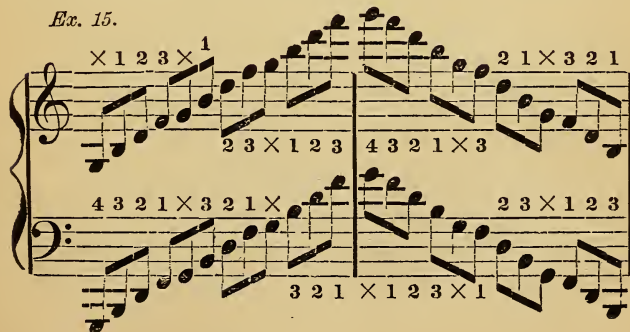
Such arpeggios are fingered the same as if all the keys were white.

Ex. 14.



Arpeggios of four letters require the use of all the fingers; e. g.,

Ex. 15.



The same chord separated differently.

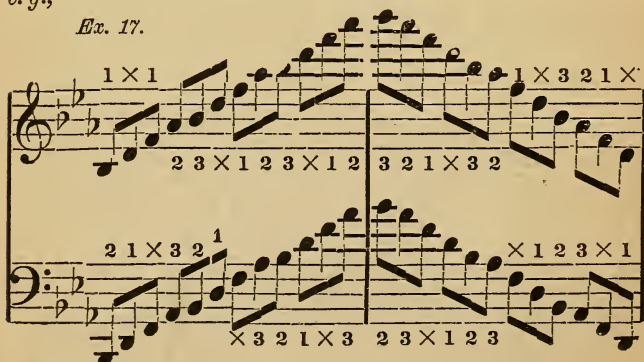
Ex. 16.



When the student has learned examples 15 and 16, he can finger any arpeggio of four letters which commences upon a white key, whether the other keys are white or black.

If an arpeggio of four letters commences upon a black key, use the thumb for the first white key in the right hand. By this means the thumbs will always pass under black keys, and the fingers be put over upon black keys;
e. g.,

Ex. 17.



The following "Rules and Exceptions" are given in this work by permission of their author, GEO. H. BANGS:

RULES AND EXCEPTIONS

FOR FINGERING THE MAJOR AND MINOR COMMON CHORD ARPEGGIOS.

RULE 1. Begin and end each position with the thumb and fourth finger, using the thumbs on the key of the same letter ascending and descending.

EXCEPTION 1st. When there is one black key in the chord, and the arpeggio begins on that key, use the thumb of the right hand on the first following white key of the chord, and the thumb of the left hand on the second following white key of the chord. This applies in ascending, it being the reverse in descending.

EXCEPTION 2d. When there are two black keys in the chord and the arpeggio begins with a black key, use the thumbs on the white keys.

RULES AND EXCEPTIONS

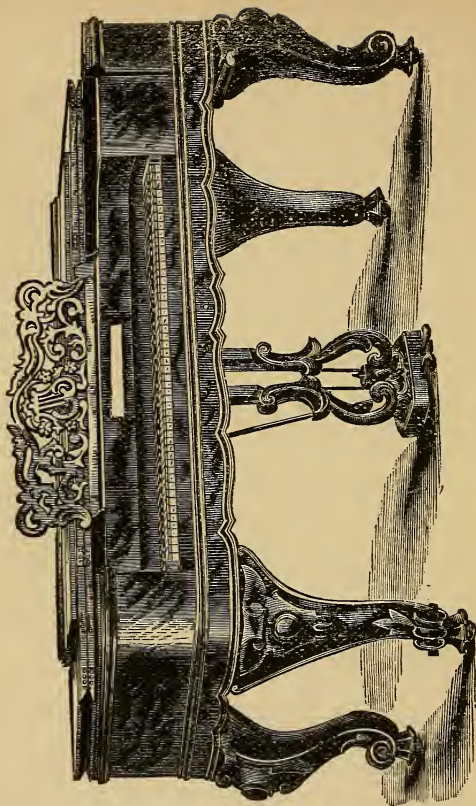
FOR THE ARPEGGIO CHORDS OF THE DOMINANT AND DIMINISHED SEVENTH.

RULE 1. Begin and end each position with the thumb and fourth finger, using the thumbs on the key of the same letter ascending and descending.

EXCEPTION 1st. When there is one black key in the chord, and the arpeggio begins on that black key, use the third fingers on the black keys only.

EXCEPTION 2d. When there are two black keys in the chord, and the arpeggio begins on a black key, use the thumb of the right hand on the first following white key of the chord, and the thumb of the left hand on the second following white key of the chord. This applies in ascending, it being the reverse in descending.

EXCEPTION 2d. When there are three black keys in the chord, and the arpeggio begins with a black key, use the thumbs on the white keys.



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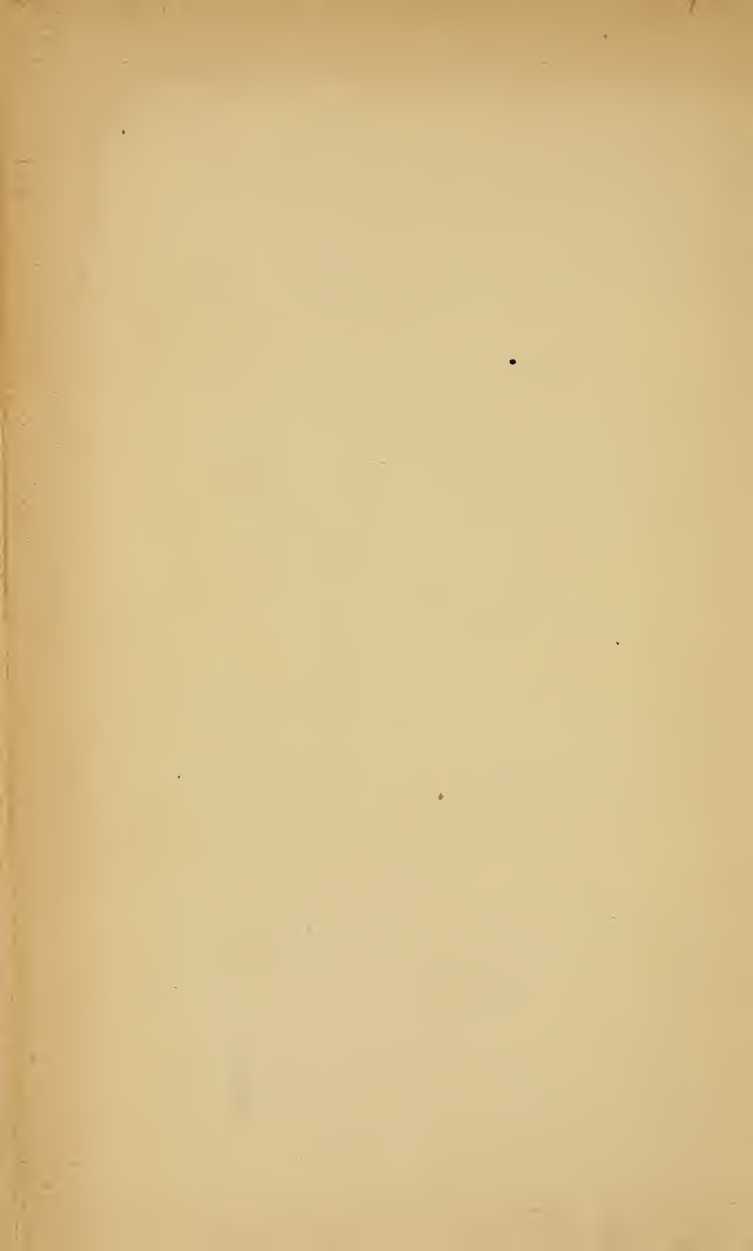
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